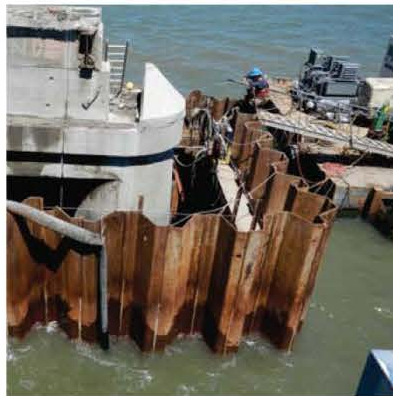


# Field Guide to Construction Site Dewatering



**Caltrans**

State of California  
Department of Transportation



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## List of Abbreviations

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|                 |   |
|-----------------|---|
| §               | section   |
| ATS             | Active Treatment Systems                        |
| BAT             | Best Available Technology                       |
| BCT             | Best Conventional Technology                    |
| BMP             | Best Management Practice                        |
| BOD             | Biochemical Oxygen Demand                       |
| Caltrans        | California Department of Transportation         |
| CEQA            | California Environmental Quality Act            |
| CFR             | Code of Federal Regulations                     |
| CGP             | Construction General Permit                     |
| CWA             | Clean Water Act                                 |
| DSA             | Disturbed Soil Area                             |
| DSWC            | District NPDES Stormwater Coordinator           |
| EPA             | U.S. Environmental Protection Agency            |
| ft              | feet  |
| ft <sup>2</sup> | square feet                                     |
| gpm             | gallons per minute                              |
| MEP             | Maximum Extent Practicable                      |
| min             | minute  |
| mm              | millimeter                                      |
| MS4             | Municipal Separate Storm Sewer System           |
| NAL             | Numeric Action Limit                            |
| NEL             | Numeric Effluent Limit                          |
| NPDES           | National Pollutant Discharge Elimination System |
| RE              | Resident Engineer                               |
| SWMP            | Storm Water Management Plan                     |
| SWPPP           | Storm Water Pollution Prevention Plan           |
| SWRCB           | California State Water Resources Control Board  |
| TSS             | Total Suspended Solids                          |
| WPCP            | Water Pollution Control Program                 |
| WQF             | Water Quality Flow                              |
| WQV             | Water Quality Volume                            |
| yd <sup>3</sup> | cubic yard                                      |

## Section 1

# Introduction

This Field Guide to Construction Site Dewatering (Dewatering Guide) provides information necessary to manage dewatering operations on Caltrans construction sites in compliance with federal and State water quality regulations.

### 1.1 Overview

The purpose of this Dewatering Guide is to inform and guide intended users in selecting, implementing, and monitoring construction site dewatering operations. Intended users of this Dewatering Guide include Resident Engineers, Caltrans employees, and Caltrans contractors.

Special situations may warrant variation from the policies and guidelines contained within this Dewatering Guide. This Dewatering Guide is neither a textbook nor a substitute for engineering or technical knowledge, experience, or judgment.

The mention of any specific commercial product, process or service in this manual is not to be construed as either an actual or implied endorsement or recommendation by Caltrans. Caltrans makes no representation or warranty of any kind, whether expressed or implied, concerning products or processes discussed in this manual.

This Dewatering Guide is organized as follows:

**Section 1 – Introduction:** Provides an overview of what activities are considered dewatering; introduces the National Pollutant Discharge Elimination System (NPDES) permits that regulate dewatering in California; describes which dewatering discharges are regulated; and, identifies the pollutants that are of concern in dewatering discharges.

**Section 2 – Selecting a Dewatering Management Option:** Provides flow charts that guide the intended user through the process of determining if the dewatering operation is subject to an NPDES permit, Waste Discharge Requirements (WDRs), or waiver, and if so, under which permit or waiver the operation is regulated.

**Section 3 – Dewatering Management Details:** Identifies the specific regulatory requirements for each specific dewatering option as well as advantages or limitations of selecting a particular dewatering option.

**Appendix A – Dewatering Permit Requirements:** Presents a summary of NPDES permit requirements or waivers for dewatering discharges in each Regional Board jurisdiction; contains maps of the nine Regional Boards overlaid on the Caltrans District boundaries; and, provides Regional Board contacts for the relevant NPDES permit or discharge waiver.

**Appendix B – Sediment Treatment Options:** Contains brief descriptions, costs, and considerations for the following treatment technologies: desilting basins, sediment traps, weir tanks, gravity bag filter, sand media filter, pressurized bag filter, and cartridge filter. Also includes a brief description of the use of an Active Treatment System (ATS).

**Appendix C – Assessment and Monitoring Forms:** Contains forms for assessing dewatering options and recording decision making. Also contains forms for monitoring discharges from dewatering operations.

**Appendix D – Regional Board General NPDES Permit and Waiver Requirements:** Presents general NPDES permits that regulate dewatering operations in each Regional Board. Also, some Regional Boards have waivers from waste discharge requirements and waivers from report of waste discharge. These waivers are included, where appropriate.

**Appendix E – Defined Terms:** Includes terms that relate to dewatering operations and permitting.

**Appendix F – Endnotes and Relevant Citations:** Contains endnotes for the Dewatering Guide. These endnotes contain additional information and citations that intended users may find helpful. Endnotes are indicated in the text with a superscript lower-case Roman numeral. Footnotes are indicated by a superscript Arabic numeral.

## 1.2 Dewatering Operations Defined

Dewatering operations occur when accumulated precipitation or non-storm water must be removed from a work location so that construction may be accomplished. Figure 1-1 illustrates the construction-site dewatering process. Pollutants may be discharged during dewatering activities and for this reason, a number of NPDES permits regulate the discharge of dewatering waters.

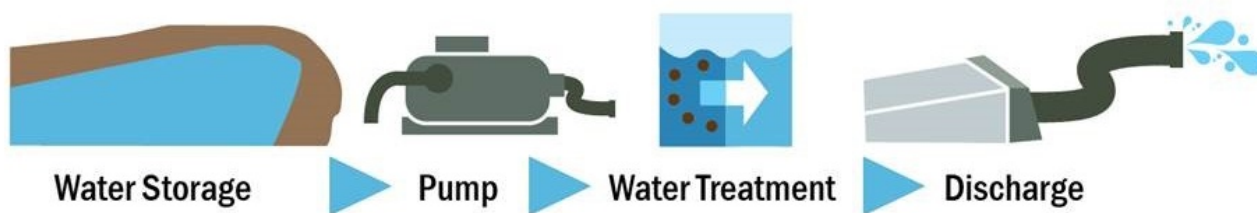


Figure 1-1. General Construction Site Dewatering Process

The Construction General Permit<sup>1</sup> governs water quality compliance for Caltrans construction or demolition activities that occur on project sites having equal to or greater than one acre of land surface disturbance. Waters generated from dewatering activities on these types of construction sites are considered authorized non-storm waters.<sup>i</sup> Typical sources of non-storm water from Caltrans construction site dewatering include groundwater, water from cofferdams, water diversions, and waters used during construction activities that must be removed from a work area.

Dewatering operations may occur during a wide range of activities on Caltrans construction sites including demolition of pavement or structures; grading (including cut and fill slopes); channel excavation; channel paving; trenching and underground drainage; installation of underground drainage facilities; drainage inlet modification; utility trenching; utility installation; structure excavation; bridge or structure construction; miscellaneous concrete work; sound or retaining wall construction; planting and irrigation; and, treatment best management practice (BMP) construction and maintenance.<sup>ii</sup>

The discharge of accumulated precipitation is also governed by the Construction General Permit. Discharge of accumulated precipitation is generally considered a stormwater discharge; however, accumulated precipitation may be commingled with non-storm water or impacted by construction

<sup>1</sup> State Water Resources Control Board, *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities and Land Disturbances (CAS000002, Order No. 2009-0009-DWQ)*, issued September 2, 2009 (herein, “Construction General Permit”).

materials or activities. Commingled accumulated precipitation is considered non-storm water. Because of this, the management of accumulated precipitation is described in the Dewatering Guide.

The Construction General Permit allows any of the nine Regional Water Quality Control Boards (Regional Boards) to regulate dewatering discharges using a general NPDES permit or site-specific permit.<sup>iii</sup> Eight Regional Boards have issued general NPDES permits<sup>iv</sup> that regulate dewatering discharges. One Regional Board has issued WDRs that govern construction dewatering. Three Regional Boards have issued waivers of WDRs or waivers from reports of waste discharge (RWD) for construction dewatering.

On Caltrans construction sites, a dewatering and discharge work plan, meeting appropriate regulatory requirements<sup>v</sup> must be prepared before dewatering operations occur.<sup>vi</sup>

## 1.3 Permits and Regulations that Apply to Dewatering Operations

Dewatering operations are governed by federal and California law as implemented through California regulations. Although not specifically described by this dewatering guide, two types of permits may also apply on construction sites: groundwater extraction associated with cleanup of volatile organic and petroleum compounds and utility vault dewatering (see Section 1.3.6).

### 1.3.1 Federal Regulations

Federal regulations for controlling discharges of pollutants from municipal separate storm sewer systems (MS4s), construction sites, and industrial activities were incorporated into the NPDES permit process by the 1987 amendments to the Clean Water Act (CWA) and by the subsequent 1990 promulgation of federal stormwater regulations by the U.S. Environmental Protection Agency (EPA). The EPA regulations require construction and stormwater discharges to comply with an NPDES permit. In California, the EPA delegated its NPDES permitting authority to the State Water Resources Control Board (SWRCB).

### 1.3.2 California Regulations

California and the federal government define jurisdictional waters differently.<sup>vii</sup> This has important implications for the management of dewatering discharges. Federal regulations only govern discharges to Waters of the United States. Waters of the United States are surface waters and discharges to those waters are governed by an NPDES permit. The SWRCB and the associated Regional Boards implement the NPDES permit program in California.

California has a broader definition of waters subject to its jurisdiction. California regulates discharges to both surface waters and groundwater. California uses WDRs to regulate discharges that may impact groundwater. Thus, discharges solely to land are typically regulated using WDRs.

In addition to using WDRs or NPDES permits to regulate discharges, a Regional Board or the SWRCB may issue a waiver from WDRs or RWD for certain discharges. Region 5, Region 8, and Region 9 currently have such waivers and these waivers mostly regulate discharges to land. Additionally, the statewide low-threat discharge WDRs, discussed later, applies to certain discharges to land.

### 1.3.3 Caltrans MS4 Permit

The current Caltrans MS4 Permit does not regulate Caltrans construction sites having a land disturbance area greater than or equal to one acre.<sup>viii</sup> For these sites, the Caltrans permit only “impose[s] electronic filing, notification, reporting, and contractor requirements for certain construction projects, and imposes limitations on types of materials that may be used during construction which may have an impact on post-construction discharges.”<sup>ix</sup> Caltrans construction sites having land disturbance area less than one acre are regulated by the Caltrans MS4 Permit and must implement appropriate BMPs.<sup>x</sup>

### 1.3.4 Discharge of Accumulated Precipitation (Stormwater)

Within each Regional Board jurisdiction, accumulated precipitation (accumulated stormwater) from Caltrans construction activities may be discharged to a storm drain or water body in accordance with the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities and Land Disturbances (CAS000002, Order No. 2009-0009-DWQ)*, issued September 2, 2009 (Construction General Permit).<sup>xi</sup> This permit regulates storm water discharges from construction or demolition activities that result in a land disturbance of greater than or equal to 1 acre, except when such activities occur in the Lake Tahoe Hydrologic Unit.<sup>xii</sup>

Construction activities greater than 1 acre occurring in the Lake Tahoe Hydrologic Unit are governed by the *General Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit, Counties Of Alpine, El Dorado, and Placer (CAG616002, Order No. R6T-2011-0019)*, issued April 14, 2011 (Lake Tahoe CGP).<sup>xiii</sup> Accumulated precipitation cannot be discharged from the construction site to a waterbody. However, discharges to land of dewatering waters are allowed if certain requirements are met.<sup>xiv</sup>

In the Lahontan Region, other than in the Lake Tahoe Hydrologic Unit, a separate permit regulates discharges of accumulated stormwater. This permit, the *General Waste Discharge Requirements for Small Construction Projects, Including Utility, Public Works, and Minor Streambed/Lakebed Alteration Projects in the Lahontan Region Excluding the Lake Tahoe Hydrologic Unit (Board Order No. R6T-2003-0004, Lahontan Small Construction Permit)*, covers construction sites having an area between 10,000 square feet and one acre. Like the Lake Tahoe CGP, the Lahontan Small Construction Project permit only allows discharges to land of accumulated stormwater if certain conditions are met.<sup>xv</sup>

### 1.3.5 Non-Storm Water Dewatering Operations

Under the Construction General Permit, dewatering of uncontaminated non-storm water is an authorized non-storm water discharge.<sup>xvi</sup> The Construction General Permit regulates dewatering, unless a regional NPDES permit applies.<sup>xvii</sup> Non-storm water includes, but is not limited to, groundwater, dewatering of piles, water from cofferdams, water diversions, and water used during construction activities that must be removed from a work area.

Under the Construction General Permit, discharges must meet specific requirements of the Construction General Permit including meeting the prohibitions of the applicable Basin Plan, compliance with the prohibitions on discharges of toxics, implementing BMPs to prevent contact of dewatering waters with construction materials or equipment, and monitoring for and compliance with applicable numeric action levels (NALs), receiving water triggers, or numeric effluent limitations (NELs).<sup>xviii</sup>

General NPDES permits that regulate specific types of dewatering discharges are identified in Table 1-1 and are further discussed in Section 3.9. Copies of these permits are provided in Appendix D.



**Table 1-1. Caltrans Districts and Related Regional Board General Permits, WDRs & Waivers that Regulate Dewatering**

| Caltrans District | Regional Board Dewatering General Permit, WDRs & Waivers  |
|-------------------|---|
| 1                 | Region 1 – General Permit R1-2009-0045<br>Region 5 – General Permit R5-2013-0074, Resolution R5-2013-0145   |
| 2                 | Region 1 – General Permit R1-2009-0045<br>Region 5 – General Permit R5-2013-0074, Resolution R5-2013-0145<br>Region 6 – General Permit R6T-2008-0023 & R6T-2003-0004  |
| 3                 | Region 5 – General Permit R5-2013-0074, Resolution R5-2013-0145<br>Region 6 – General Permit R6T-2008-0023 & R6T-2011-0019  |
| 4                 | Region 1 – General Permit R1-2009-0045<br>Region 2 – No General Permit<br>Region 3 – General Permit R3-2011-0223<br>Region 5 – General Permit R5-2013-0074, Resolution R5-2013-0145   |
| 5                 | Region 2 – No General Permit<br>Region 3 – General Permit R3-2011-0223<br>Region 5 – General Permit R5-2013-0074, Resolution R5-2013-0145   |
| 6                 | Region 5 – General Permit R5-2013-0074, Resolution R5-2013-0145<br>Region 6 – General Permit R6T-2008-0023 & R6T-2003-0004  |
| 7                 | Region 3 – General Permit R3-2011-0223<br>Region 4 – General Permit R4-2013-0095 & R4-2013-0043<br>Region 5 – General Permit R5-2013-0074, Resolution R5-2013-0145<br>Region 6 – General Permit R6T-2008-0023 & R6T-2003-0004   |
| 8                 | Region 6 – General Permit R6T-2008-0023 & R6T-2003-0004<br>Region 7 – General Permit R7-2009-0300<br>Region 8 – General Permit R8-2009-0003 & R8-2007-0041, Resolution R8-2013-0015<br>Region 9 – General Permit R9-2007-0034 & R9-2008-0002, Resolution R9-2007-0104 |
| 9                 | Region 6 – General Permit R6T-2008-0023 & R6T-2003-0004   |
| 10                | Region 2 – No General Permit<br>Region 5 – General Permit R5-2013-0074, Resolution R5-2013-0145<br>Region 6 – General Permit R6T-2008-0023 & R6T-2011-0019  |
| 11                | Region 7 – General Permit R7-2009-0300<br>Region 9 – General Permit R9-2007-0034 & R9-2008-0002, Resolution R9-2007-0104  |
| 12                | Region 8 – General Permit R8-2009-0003 & R8-2007-0041, Resolution R8-2013-0015<br>Region 9 – General Permit R9-2007-0034 & R9-2008-0002, Resolution R9-2007-0104  |

### 1.3.6 Contaminated Groundwater

Each Regional Board has general permits that regulate the cleanup of contaminated groundwater. Those permits that specifically include construction dewatering are included and described in this Dewatering Guide (i.e., Region 4 and Region 9). However, contaminated groundwater is sometimes encountered on Caltrans construction sites and for that reason, Table 1-2 is provided.

**Table 1-2. Regional Board General Permits  
that Regulate Groundwater Extraction**

| Caltrans District | Regional Board Groundwater Extraction General Permit  |
|-------------------|---|
| 1                 | Region 1 - General Permit R1-2011-0028<br>Region 5 - General Permit R5-2013-0074  |
| 2                 | Region 1 - General Permit R1-2011-0028<br>Region 5 - General Permit R5-2013-0073 & R5-2013-0075<br>Region 6 - General Permit R6T-2010-0024  |
| 3                 | Region 5 - General Permit R5-2013-0073 & R5-2013-0075<br>Region 6 - General Permit R6T-2010-0024  |
| 4                 | Region 1 - General Permit R1-2011-0028<br>Region 2 - General Permit R2-2012-0012<br>Region 3 - General Permit R3-2011-0222<br>Region 5 - General Permit R5-2013-0073 & R5-2013-0075                                     |
| 5                 | Region 2 - General Permit R2-2012-0012<br>Region 3 - General Permit R3-2011-0222<br>Region 5 - General Permit R5-2013-0073 & R5-2013-0075   |
| 6                 | Region 5 - General Permit R5-2013-0074<br>Region 6 - General Permit R6T-2010-0024   |
| 7                 | Region 3 - General Permit R3-2011-0222<br>Region 4 - <b>General Permit R4-2013-0043<sup>1</sup></b><br>Region 5 - General Permit R5-2013-0073 & R5-2013-0075<br>Region 6 - General Permit R6T-2010-0024                 |
| 8                 | Region 6 - General Permit R6T-2010-0024<br>Region 7 - General Permit R7-2009-0400<br>Region 8 - General Permit R8-2012-0027<br>Region 9 - <b>General Permit R9-2007-0034<sup>1</sup> &amp; R9-2008-0002<sup>1</sup></b> |
| 9                 | Region 6 - General Permit R6T-2010-0024   |
| 10                | Region 2 - General Permit R2-2012-0012<br>Region 5 - General Permit R5-2013-0073 & R5-2013-0075<br>Region 6 - General Permit R6T-2010-0024  |
| 11                | Region 7 - General Permit R7-2009-0400<br>Region 9 - <b>General Permit R9-2007-0034<sup>1</sup> &amp; R9-2008-0002<sup>1</sup></b>  |
| 12                | Region 8 - General Permit R8-2012-0027<br>Region 9 - <b>General Permit R9-2007-0034<sup>1</sup> &amp; R9-2008-0002<sup>1</sup></b>  |

<sup>1</sup> This permit also regulates various categories of discharges including construction dewatering

### 1.3.7 Utility Vault Dewatering

Utility vaults, which are typically located in the ground, often collect groundwater. To enable the safe maintenance or inspection of these vaults, utility companies must dewater these vaults.<sup>xix</sup> Many of these vaults are located on Caltrans construction sites. Although Caltrans operations do not typically require permit coverage for such discharges, the Utility Vault General Permit is provided in Appendix D for informational purposes. Despite the Utility Vault expiration date having passed, it is still in effect.<sup>xx</sup>

## 1.4 Dewatering Operations Requiring an NPDES Permit

An NPDES permit is not typically needed if the water is discharged to a sanitary sewer, reused on the construction site, discharged to adjacent land, used at an adjacent facility, or treated off-site. Where possible, dewatering operations should utilize one or more of these options. Prior to utilizing these disposal, use, or treatment options, any or all of the following may be required: a written agreement, water sampling and analysis, or pre-treatment.

Discharge to a waterbody, storm drain, or MS4 typically requires extensive analytical data, cost, and time. A typical NPDES permit application requires detailed information about the chemical constituents in the proposed discharge as well as a description of any treatment techniques utilized. The Regional Board must have sufficient time to review the permit application and issue a notice that the permittee can be covered under a general NPDES permit (or issue a separate site-specific NPDES permit). Once coverage is granted under the NPDES, both the effluent discharge and the receiving water must be monitored and the results must be routinely reported to the Regional Board.

## 1.5 Why are Dewatering Operations Regulated?

Untreated water from construction dewatering operations may contain pollutants that, if discharged to a storm drainage system or natural water course, may exceed water quality standards of the receiving water. The intent of federal and State regulations is to prevent discharges from dewatering operations from contributing to the exceedance of water quality standards.

## 1.6 What are Considered Pollutants?

Specific pollutants are defined by the federal Clean Water Act (CWA) and the Porter-Cologne Act<sup>xxi</sup>. For the purposes of this Dewatering Guide, pollutants are classified into three groups:

- **Sediment.** Sediment is the most common pollutant associated with dewatering operations on construction sites. A visible pollutant, sediment concentration is typically monitored as turbidity, total suspended solids, or suspended sediment concentration. Turbidity is a key parameter monitored under the Construction General Permit. Most dewatering operations require treatment to remove some amount of sediment. Detailed information about sediment removal methods and technologies have been provided in Appendix B.
- **pH.** pH is the other key parameter monitored under the Construction General Permit. High pH readings are typically associated with concrete and grouting operations. Because such activities do not typically occur near dewatering operations, readings outside the pH limits (i.e., below a pH of 6.5 or above 8.5) are not typically expected. However, such readings may occur when grouting operations occur near a dewatering operation, where cooling water is used in concrete curing, or where concrete is being poured in an area that is being dewatered for the placement of a concrete pile or footing. Unlike sediment, pH is a non-visible pollutant.
- **Other pollutants.** This includes all other pollutants as defined in federal and State laws and regulations. These pollutants tend to be site-specific and are often associated with current or past use of the construction site or adjacent land. Commonly, “other pollutants” on construction sites include: nitrogen and phosphate from fertilizers (i.e., nutrients); organic materials from plant waste; metals such as arsenic, cadmium, copper, and lead; and constituents that affect pH or hardness. Other pollutants also include oil, grease, pesticides, solvents, fuels, trash, and bacteria from human/animal wastes. These pollutants may come from construction materials such as form release agents, concrete curing compound, concrete sealants, drilling compounds, welding waste, hydrating concrete, blasting grit, sawdust, and residues from pile driving hammers.

Other pollutants may be visible or non-visible. For example, many metals may be present in a non-visible form on a project site. For this reason, any potential non-storm water (or even stored precipitation) discharges must be evaluated for the potential contact with construction activities or materials that are sources of non-visible pollutants. If such contact may have occurred, the non-storm water discharge can only occur after a testing program for the non-visible pollutant shows that the expected non-visible pollutant was not detected or was below a defined and applicable trigger value. Non-visible pollutant testing is typically conducted at certified laboratories.<sup>xxii</sup>

## 1.7 Options for Managing Dewatering Operations

The options for managing dewatering operations depend on the condition and volume of the water to be discharged and the conditions of the construction site. For example, under the appropriate conditions, dewatering management options may include:

- Collected water from dewatering can be managed within the construction site, without discharging off the site or to a water body or drainage system.
- Discharge of water, by agreement, to adjacent land or within the Caltrans right-of-way not within the project boundary.
- Use of water, by agreement, at a facility owned by others, such as an industrial operation.
- Discharges, made by agreement, to the sanitary sewer system.
- Collected water from dewatering can be removed from the construction site by a contractor for off-site treatment and disposal.
- Discharges to the storm drainage system or to a Water of the United States under the Construction General Permit.
- Discharges can be made to the storm drainage system or Water of the United States under a General NPDES Permit or site-specific NPDES permit issued by the Regional Board.

Section 2 provides flow charts that explain the process of determining which management options are appropriate for dewatering operations in each Region.

## 1.8 What is the Resident Engineer's Responsibility for Dewatering Permits Issued Prior to Construction?

For some construction projects, dewatering requirements are identified during the planning and design phases, and the appropriate NPDES permit that regulates dewatering is obtained prior to construction.

If an NPDES permit has already been issued to regulate dewatering for the project, the Resident Engineer is responsible for ensuring that the contractor complies with the discharge, monitoring and reporting provisions specified in the permit.

## 1.9 How to Use This Dewatering Guide

The Dewatering Guide directs the intended user through the process of evaluating dewatering operations on the construction site to ensure that appropriate regulatory requirements are met. The steps in this process are as follows:

1. **Characterize the water to be managed. Follow the instructions in Sections 2.1 through 2.3 to characterize the effluent associated with the dewatering operation.**

These sections contain a series of questions and calculations for assessing water quality and estimating discharge parameters that can affect selection of management options. Appendix C contains a form that can aid in the assessment.

2. **Select an appropriate dewatering management option following the flow chart in Section 2.**

Use the flow chart in Figure 2-1 to identify the possible management options for the dewatering operation based on the assessment performed in step 1. Section 3 describes management options in more detail and provides guidance for determining if the option is appropriate for the dewatering operation.

3. **If discharging water to a storm drain or water of the U.S.**

- Follow the guidance in Section 3.8 if the discharge is authorized under the Construction General Permit, or Section 3.9 if a separate Regional Board permit is required.
- Refer to Appendix A to determine which Regional Board has jurisdiction over the project and for a summary of applicable waiver, WDR, and general NPDES permit requirements.

4. **Refer to Appendix B to identify sediment treatment options.**

Appendix B describes and compares some sediment removal technologies that are appropriate for waters generated during construction dewatering.



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## Section 2

# Selecting a Dewatering Management Option

The Dewatering Operations Management Flow Chart (Figure 2-1) describes the process of identifying feasible options for managing a dewatering operation and whether or not an NPDES permit applies to the operation. The flow chart contains references to other sections of the Dewatering Guide which contain additional explanation or guidance.

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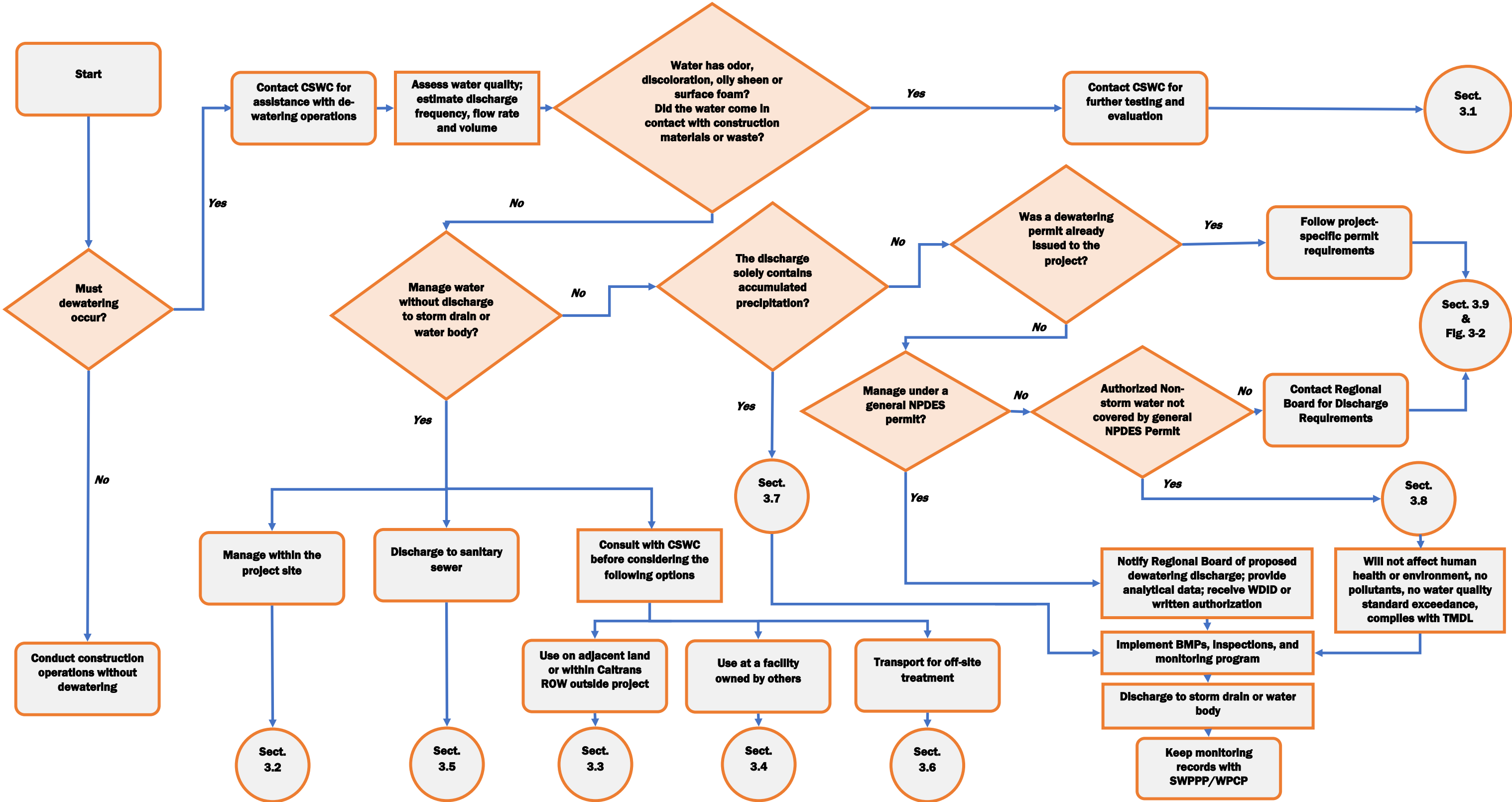


Figure 2-1. Dewatering Operations Management Flow Chart

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## 2.1 Assess Water Quality

The quality of the water from dewatering operations determines the management option selected for the construction site. Each management option has a different set of water quality requirements. For instance, discharge to a sanitary sewer of waters containing pollutants may occur with little or no pre-treatment, while discharge to a storm drain may not occur until the water is first treated.

The suggested procedure for assessing the water quality of the dewatering discharge is as follows:

1. To aid in the assessment, use the Water Quality Assessment section of the *Water Quality and Discharge Parameters Assessment Form* in Appendix C and duplicated in Table 2-1 below. This contains a set of water quality questions that can be completed onsite.
  - a. *For accumulated precipitation*, complete one form for each accumulation location that is expected to have unique characteristics. If rainwater accumulates in multiple depressions adjacent to each other (assumed to have the same soil, land use, etc.), a single assessment can be made for the rain event. On the other hand, if rainwater accumulates in multiple locations distant from each other, assess water quality at each location for the event.
  - b. *For assessing non-storm water (groundwater, cofferdam, diversion water etc.)*, complete one form for each dewatering location that is expected to have unique characteristics. For example, if groundwater is being removed from multiple areas adjacent to each other (assumed to have the same soil, land use, etc.), a single assessment can be made for the activity. If groundwater is being removed at multiple locations distant from each other, assess the water quality at each location.
2. If you answered YES to any of the Water Quality Assessment questions on the form, or you suspect that the water contains pollutants other than sediment, contact the Construction Storm Water Coordinator (CSWC) for assistance with additional testing and management options. Refer to Section 3.1 for more information about managing water containing pollutants other than sediment.
3. If you answered NO to all of the Water Quality Assessment questions on the form, estimate the discharge parameters, as described in Section 2.2.
4. Submit the completed form to the RE for approval. File approved forms with the Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) in Category 20 of the Project File.
5. The forms contained in Appendix C should be filled out to document the Resident Engineer's determination that accumulated stormwater/non-storm water has been or has not been impacted by construction activities and materials.

**Table 2-1 Water Quality Assessment Example**

The following questions provide an initial assessment of the quality of the water to be discharged from the dewatering operation.

|                      |  |   |               |                  |               |       |
|----------------------|--|---|---------------|------------------|---------------|-------|
| Common<br>Sense Test | 1. The common sense test determines if the water has pollutants that cannot be seen by the naked eye (i.e., non-visible pollutants): |   |               |                  |               |       |
|                      | a.   | Is there any reason to suspect that the water may be polluted by something other than sediment? |               |                  | YES           | NO    |
|                      | b.   | Is the water located in an area of known contamination?   |               |                  | YES           | NO    |
|                      | c.   | Has the water come in contact with construction activities or construction materials?           |               |                  | YES           | NO    |
| Sight Test           | 2. The sight test determines if the water has visible pollutants.  |   |               |                  |               |       |
|                      | a.   | Does the water have an abnormal visual feature?   |               |                  | YES           | NO    |
|                      | b.   | If yes, circle the appropriate visual feature:  |               |                  |               |       |
|                      |  | Oily Sheen  | Floating Foam | Murky Appearance | Unusual Color | Other |
| Smell Test           | 3. Does the water have an odor?  |   |               |                  | YES           | NO    |

If you answered YES to any of the above questions, explain:

If you answered YES to any of the questions in the assessment, the water contains (or probably contains) non-visible pollutants. If you answered YES to any of these questions or suspect that the water contains pollutants other than sediment, contact the CSWC for assistance with additional testing and management options.



## 2.2 Estimated Discharge Parameters

Most Regional Boards and sanitary sewer districts have specific discharge requirements based on the flow rate, daily volume, total volume, and duration of the dewatering operation. Typical flow rates for submersible pumps are presented in Table 2-2.

| Table 2-2. Typical Pump Flow Rates |                                 |
|------------------------------------|---------------------------------|
| Pump Size<br>(submersible)         | Typical Flow Rates <sup>1</sup> |
| 1.5-inch                           | 90 to 120 gpm                   |
| 2-inch                             | 90 to 300 gpm                   |
| 3-inch                             | 300 to 800 gpm                  |
| 4-inch                             | 400 to 1,300 gpm                |
| 6-inch                             | 400 to 1,800 gpm                |

<sup>1</sup>Based on manufacturers' general information

To estimate discharge parameters, use the Discharge Parameters section of the Water Quality and Discharge Parameters Assessment Form in Appendix C and duplicated in Table 2-3 below. This form guides the user through a set of calculations that can be completed onsite.

If several different sources are collected in the same excavation or low spot, include the flow rate of all of the sources. If the sources are a combination of accumulated rain water and non-stormwater, the water must be managed as non-storm water.

The pump sizes and flow rates in Table 2-2 can be used to aid in this estimate. The pump discharge flow and horsepower will vary depending on the system's total dynamic head (distance and height required to pump).

The suggested procedure for estimating discharge parameters of the dewatering operation is as follows:

1. Complete the Discharge Parameters form as follows:
  - a. *For assessing accumulated precipitation*, complete one form for each accumulation location for the rain event.
  - b. *For assessing non-storm water (groundwater, cofferdam or diversion water, etc.)*, complete one form for each dewatering location.
2. Submit the completed form to the RE for approval. File approved forms with the SWPPP or WPCP in Category 20 of the Project File.

Table 2-3 Discharge Parameter Calculation Sheet Example

To estimate water discharge parameters, answer the following questions and document the results below.

|                           |  |
|---------------------------|--|
| Origin of Water           | 1. The discharge is from (circle one):<br><div style="display: flex; justify-content: space-around;"> <span>Groundwater</span> <span>Cofferdam/Diversion</span> </div> <div style="display: flex; justify-content: space-around;"> <span>Accumulated Precipitation</span> <span>Other (specify)</span> </div>  |
|                           | 2. Will the discharge be intermittent or continuous (circle one)?<br><div style="display: flex; justify-content: space-around;"> <span>Intermittent</span> <span>Continuous</span> </div>  |
| Proposed Daily Flow Rate  | 3. Estimate the total quantity of water and proposed discharge rate for each daily discharge event ( $Q_d$ , gallons per day). This can be estimated from the pump discharge rate and the expected daily total of hours the pump will be run.<br>$Q_d$ (gpd) = _____ gals/min pump rate x 60 minutes/hour. x _____ hours discharge $Q_d$ = _____ gpd   |
| Additional Considerations | 4. How does the proposed daily flow rate compare to that of the receiving water?<br>a. Receiving water flow rates can be acquired from the National Weather Service's California Nevada River Forecast Center ( <a href="http://www.cnrfc.noaa.gov/">http://www.cnrfc.noaa.gov/</a> ).<br>5. How does the discharge pH and turbidity compare to the receiving water pH and turbidity?<br>6. If an exceedance occurs, the operation must be stopped and a reevaluation must occur.<br>7. During dewatering, apply controls to minimize the amount of water flowing into the excavation.<br>8. Ensure that the discharge occurs during appropriate work windows as specified in the relevant permit or permits.<br><br>Other potential sources for "origin of water" include: concrete column cooling water discharge or water collected in low-lying areas at the site (evaluate all construction activities and materials that may contact waters flowing from upstream locations) |
| Duration                  | 9. What is the expected duration of the dewatering operation? _____ (days)   |
| Total Discharge           | 10. What is the estimated total discharge for the project duration ( $V_T$ )?<br>a. To estimate the total discharge, multiply the daily flow rate ( $Q_d$ ) by the estimated duration. $V_T$ = _____ gallons   |
| Comments:                 |  |

## 2.3 Evaluate if the Discharge is an Authorized Non-Storm Water Discharge

Under the Construction General Permit, dewatering is an authorized non-storm water discharge. The Construction General Permit regulates dewatering, unless a general NPDES permit issued by a Regional Board governs that specific type of dewatering operation.<sup>xxiii</sup> Numerous Regional Boards have issued general NPDES permits to regulate specific types of dewatering discharges. These Permits are further discussed in Section 3.9 and copies of these permits are provided in Appendix D.

The types of general NPDES permits which may regulate dewatering discharges are as varied as California's nine Regional Boards. These general NPDES permits can be divided into three general types: 1) low threat, limited threat or "de minimus", 2) dewatering, and 3) groundwater cleanup. Additionally, three water boards (Lahontan, San Diego, and Santa Ana) have permits that are based on the specific hydrologic unit to which the discharge will occur. Some of the permits that specifically mention dewatering also cover groundwater cleanup or low threat discharges (these are highlighted in Table 1-2).

Region 1, Region 3, Region 5, Region 6, Region 7, Region 8, and Region 9 have general NPDES permits which regulate low threat, limited threat, or "de minimus" discharges. Generally, such discharges are unlikely to violate Regional Board Basin Plan water quality objectives. Some of these permits have discharge flow and duration limitations, others have limits on the pollutant concentrations, and others cover discharges based on category of discharges. Many of these permits consolidate categories of discharges that were formerly covered under separate general NPDES permits (i.e., Region 7). If the discharge is to land, the statewide low-threat discharge WDRs may also apply to the discharge.<sup>xxiv</sup>

Region 4, Region 6, Region 8, and Region 9 have permits that regulate some manner of groundwater cleanup of volatile organic compounds or petroleum-based substances. Additionally, Region 4, Region 5, Region 8 have permits that specifically refer to dewatering.

Region 2 does not have a general NPDES permit or WDR that applies to dewatering. Also, Region 2 does not have a waiver from WDRs or RWD for dewatering discharges. Thus, many discharges of non-storm water are covered under the Construction General Permit or under the statewide low-threat discharge WDRs<sup>xxv</sup>.

If a limited threat permit does not apply, if a groundwater cleanup permit does not apply, or if a dewatering-related general NPDES permit does not apply, then coverage may be sought under the statewide low-threat discharge WDRs (for discharges to land) or a site-specific permit (for discharges to a waterbody or to land).

## 2.4 Determine if the Discharge will be to a Waterbody or to the Land

For discharges to the land, the statewide low-threat discharge WDRs may apply, or a waiver from WDRs or RWD may apply. Such waivers exist for Region 5, Region 8, and Region 9. If the discharge is to a waterbody, select the appropriate general NPDES permit or the Construction General Permit.

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## Section 3

# Dewatering Management Details

Management of water resulting from dewatering operations is described in this section.

Typically, the District NPDES Stormwater Coordinator (DSWC) is the main point of contact between the Regional Boards and the Caltrans District. The CSWC works with the DSWC to ensure that construction sites comply with Regional Board requirements. The CSWC, may, under some circumstances, also contact the Regional Board with the DSWC's assistance.

## 3.1 Manage Water Containing Pollutants Other than Sediment

### 3.1.1 Definition

Water that contains, or is suspected of containing, pollutants<sup>xxvi</sup> other than sediment is typically subject to additional testing and evaluation prior to the selection of an appropriate dewatering management option.

### 3.1.2 Implementation

The Resident Engineer contacts the CSWC for assistance with additional testing and evaluation. In determining additional testing requirements, the preferred management option should be considered. Each agency or entity (sanitary sewer, adjacent land owner, waste hauler, Regional Board, etc.) will mandate specific tests prior to accepting water for discharge. Based on test results, the following management options may be considered for potentially polluted water:

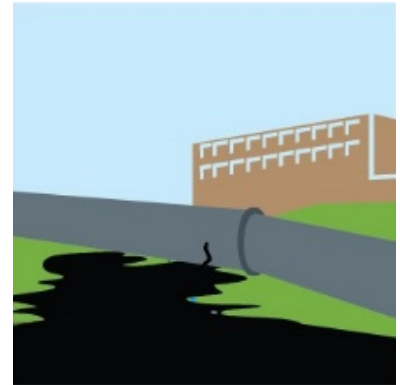
- Water may meet requirements for discharge to a sanitary sewer. Refer to Section 3.5 for more information.
- Water may be transported from the construction site by a licensed contractor for off-site treatment. Refer to Section 3.6 for more information.
- Water may be treated and discharged in accordance with a separate general NPDES permit issued by the Regional Board. Refer to Section 3.9 for more information about this management option.
- If water quality testing shows that water would meet Regional Board basin plan requirements, the Regional Board may allow it to be discharged under a general NPDES permit or the Construction General Permit. Discuss this option with the CSWC and the appropriate Regional Board.

### 3.1.3 Advantages

- Ensures that dewatering operations containing pollutants other than sediment are managed in compliance with NPDES requirements.

### 3.1.4 Limitations

- Time required to test water and obtain permit.
- Cost of effluent, receiving water, and on-going testing, if required.
- Cost of treating water to remove pollutants, if required.
- On-going monitoring and record-keeping costs.



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## 3.2 Manage Water within the Project Site

### 3.2.1 Definition

Accumulated water is retained on the construction site or within the Caltrans right-of-way rather than transported or discharged off site. Retained water evaporates, infiltrates into the soil, or is used onsite for dust control, irrigation, or other construction-related purposes. Review the questions in Table 3-1 below to assess if this option is appropriate.



### 3.2.2 Implementation

This option entails 1) dispersing the water over an appropriate area or basin and allowing the water to infiltrate into the soil or evaporate, or 2) storing the water in tanks for later use on the construction site or within the Caltrans right of way.

### 3.2.3 Water Quality

- Appropriate for water free of pollutants other than sediment.
- Minor amounts of other non-hazardous pollutants may be acceptable with the agreement of the CSWC.

### 3.2.4 Advantages

- Minimal NPDES permit requirements.
- Utilizes BMP NS-1, “Water Conservation Practices.”

### 3.2.5 Limitations

- Generally not feasible for large quantities or high flow rates.
- May require space for water storage tanks.
- Requires ponded water to be infiltrated or evaporated within 72 hours, unless local vector control allows for a longer period.
- May require treatment for sediment removal.
- If discharge of pollutants, other than sediment, may occur and discharge will only be to land, appropriate coverage under a general NPDES permit, waiver, or site-specific permit must be sought.

### 3.2.6 General Requirements

- Region 5, Region 8, and Region 9 have waivers that may apply to these discharges. Additionally, the statewide low-threat discharge WDRs may apply to these discharges.
- Infiltrate/evaporate the water so that it does not remain ponded for more than 72 hours.
- If necessary, treat water to remove sediment prior to reuse on site. Refer to Appendix B for sediment treatment options.
- Retained water should not be reused near inlets or other areas where it may be inadvertently discharged from the site.
- Removed sediments must be handled properly. Retained sediment must be either dispersed onsite and stabilized, or disposed at a location approved by the Resident Engineer.

Table 3-1 Use Assessment: Manage Within the Project Site

|  |     |    |
|--|-----|----|
| 1. Answer the following questions to determine the feasibility of using this option:   |     |    |
| a. Is the water free of pollutants other than sediment?  | YES | NO |
| b. In your best judgment, is the water free of non-visible pollutants?   | YES | NO |
| c. Can the operation be managed so that <i>no water</i> leaves the construction site?  | YES | NO |
| d. Can the estimated volume of water as calculated on the <b>Discharge Parameters</b> section of the <i>Water Quality and Discharge Parameters Assessment Form</i> (Appendix C) be accommodated on the site? | YES | NO |
| e. If applicable, will ponded water evaporate or infiltrate within 72 hours of collection?   | YES | NO |

2. If you answered YES to all of the applicable questions above, consider retaining ownership of the water on site.

3. If you answered NO to any of the above questions, this option is not feasible for the site. Consider other management options.



## 3.3 Discharge to Adjacent Land or within the Caltrans Right-of-Way outside the Project Limits

### 3.3.1 Definition

Discharge of accumulated water by special agreement to adjacent land or outside the construction project limits and within the Caltrans right-of-way (e.g., settling basin, open field). Review the questions in Table 3-2 below to assess if this option is appropriate.

### 3.3.2 Implementation

This agreement should include provisions for any monetary compensation, discharge prohibitions, pre-discharge testing, and expected final condition of the area or facility to be used. If this option is considered for groundwater, discuss all regulatory and legal implications with the CSWC.



### 3.3.3 Water Quality

- An option generally appropriate for water that does not contain pollutants other than sediment.

### 3.3.4 Advantages

- Minimal NPDES permit requirements.

### 3.3.5 Limitations

- May require a fee.
- May require treatment for sediment removal.
- Requires a written agreement.
- If discharge of pollutants, other than sediment, may occur and discharge will only be to land, appropriate coverage under a general NPDES permit, waiver, or site-specific permit must be sought.

### 3.3.6 General Requirements

- The discharge must be managed so that it cannot discharge to a storm drain or surface water body.
- If sediment filtration is required, the sediment must be properly managed. Retained sediment must be either dispersed onsite and stabilized, or disposed at a location approved by the Resident Engineer.
- Water should be discharged in accordance with a written agreement from the property owner.
- The discharge must be monitored to ensure compliance.
- The discharge must not create a hazard at the discharge point.
- Pre-discharge chemical testing (if required) should be performed in accordance with the agreement, and the results provided to the owner prior to the discharge.

**Table 3-2. Use Assessment: Use on Adjacent Land or  
Within the Caltrans Right-of-Way Outside Project Limits**

1. Answer the following questions to determine the feasibility of using this option:

|    |  |     |    |
|----|--|-----|----|
| a. | Is there an appropriate landowner adjacent to the construction site that is willing to negotiate an agreement to accept your discharge?  | YES | NO |
| b. | Is the water free of visible pollutants other than sediment?   | YES | NO |
| c. | In your best judgment, is the water free of non-visible pollutants?  | YES | NO |
| d. | Can the estimated volume of water as calculated on the <b>Discharge Parameters</b> section of the <i>Water Quality and Discharge Parameters Assessment Form</i> (Appendix C) be accommodated on the adjacent land? | YES | NO |
| e. | Can the water be treated for sediment (if necessary) prior to discharge?   | YES | NO |
| f. | If the discharge consists of groundwater, does the Regional Board allow unrestricted discharge of groundwater to land (i.e., without the requirement to get a general NPDES permit)?                               | YES | NO |

2. If you answered YES to all of the applicable questions above, consider negotiating an agreement to discharge to adjacent land or to land within the Caltrans right of way, but outside the project limits. Question 1f is not always applicable, but the other questions are always applicable.

3. If you answered NO to any of the applicable questions above, this option is not feasible for the site. Consider other management options.

## 3.4 Use at a Facility Owned by Others

### 3.4.1 Definition

Discharge by special agreement of accumulated water for appropriate use at a facility owned by another. Typical uses include industrial operations; irrigation of a golf course, crops, or pasture; or, other non-potable use. Review the questions in Table 3-3 below to assess if this option is appropriate.

### 3.4.2 Implementation

This agreement should include provisions for any monetary compensation, discharge prohibitions, pre-discharge testing, and expected final condition of the area or facility to be used. If this option is considered for groundwater, discuss all regulatory and legal implications with the CSWC.

### 3.4.3 Water Quality

- An option appropriate for water that does not contain pollutants other than sediment. However, in certain cases, the adjacent facility may be able to accept water containing pollutants in addition to sediment.

### 3.4.4 Advantages

- Acceptable levels of pollutants may be discharged without pretreatment.
- Can be used to dispose of polluted water.
- No NPDES permit required.

### 3.4.5 Limitations

- May be very expensive (i.e., transport and analytical testing).
- Requires sufficient time for testing.
- Not viable for prolonged periods of dewatering or for large volumes of water.
- On-site collection/storage area may require secondary containment and permitting.

### 3.4.6 Requirements

- Chemical testing may be required.
- The water may need to be transported using the appropriate manifest and documentation requirements.
- Contact the CSWC for assistance with water that must be managed using this option.

Table 3-3. Use Assessment: Use at a Facility Owned by Others

## 1. Answer the following questions to determine the feasibility of using this option:

|    |   |     |    |
|----|---|-----|----|
| a. | Is there facility conducive to the construction site that is willing to negotiate an agreement to accept the water?   | YES | NO |
| b. | Can the estimated volume of water as calculated on the <b>Discharge Parameters</b> section of the <i>Water Quality and Discharge Parameters Assessment Form</i> (Appendix C) be accommodated by the facility? | YES | NO |
| c. | Can the water be appropriate treated by the facility (if necessary) prior to discharge?   | YES | NO |

## 2. If you answered YES to all of the questions above, consider negotiating an agreement to transfer the dewatering waters to the facility.

## 3. If you answered NO to any of the above questions, this option is not feasible for the site. Consider other management options.

## 3.5 Discharge to a Sanitary Sewer System

### 3.5.1 Definition

Discharge of water to a sewer system through a permit with the local sewerage agency. Review the questions in Table 3-4 below to assess if this option is appropriate.

### 3.5.2 Implementation

Must obtain permit from the local sanitary sewer agency. This permit will include provisions for fees, requirements for pre-discharge testing and reporting, and discharge limitations/prohibitions. If this option is used, an NPDES permit is not required for the dewatering operation.



### 3.5.3 Water Quality

- Generally appropriate for water that contains sediment and pollutants other than sediment. Sediment may require pre-treatment.
- Acceptable pollutants and pollutant levels are defined by the sewerage agency.

### 3.5.4 Advantages

- Acceptable levels of pollutants may be discharged without pretreatment.
- Water may be pumped directly from the project site with no intermediate transportation.
- No NPDES permit required.

### 3.5.5 Limitations

- May require treatment for sediment removal.
- Requires a permit from the sanitary sewer district.
- Time required to negotiate agreement and receive permission from sanitary sewer agency.
- May require a fee.
- May require pre-discharge chemical testing.

### 3.5.6 General Requirements

- A permit is required from the sanitary sewer agency to specify requirements for chemical quality of the water, discharge flow rates and quantities.
- Discharge water in accordance with written agreement from the sanitary sewer agency. The discharge may require monitoring to assure compliance.
- Pre-discharge chemical testing (if required) should be performed in accordance with sanitary sewer agency policy with results provided to the agency prior to discharge.
- Discharge records may be required to be submitted to the sanitary sewer district.
- Water may need to be treated for sediment prior to discharge.
- If sediment filtration is required, the removed sediment must be properly managed. Retained sediment must be either dispersed onsite and stabilized, or disposed at a location approved by the Resident Engineer.

Table 3-4. Use Assessment: Discharge to a Sanitary Sewer

## 1. Answer the following questions to determine the feasibility of using this option:

|    |  |     |    |
|----|--|-----|----|
| a. | Does the sewerage agency already have a standard agreement for discharge of accumulated precipitation or non-storm waters from dewatering operations or is the sewerage agency willing to negotiate an agreement and does the proposed discharge meet the terms of that agreement? | YES | NO |
| b. | Is the water quality acceptable to the sanitary sewer authority or can it be treated to meet requirements?   | YES | NO |
| c. | Can the estimated volume of water as calculated on the <b>Discharge Parameters</b> section of the <i>Water Quality and Discharge Parameters Assessment Form</i> (Appendix C) be accommodated by the sanitary sewer?  | YES | NO |

## 2. If you answered YES to all of the questions above, consider negotiating an agreement to the sanitary sewer.

## 3. If you answered NO to any of the above questions (unless 1a is NO), this option is not feasible for the site. Consider other management options.

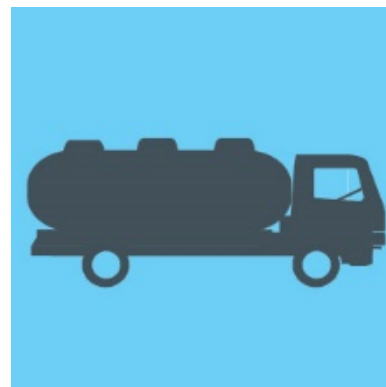
## 3.6 Off-Site Treatment

### 3.6.1 Definition

Water is hauled off-site for treatment. This typically involves a licensed commercial contractor who can remove, transport and dispose (or treat and recycle) polluted water. Review the questions in Table 3-5, below, to assess if this option is appropriate.

### 3.6.2 Implementation

Contact the CSWC for assistance. The use of a licensed-hauling contractor will require a fee and testing prior to pickup and transportation.



### 3.6.3 Water Quality

This option is typically appropriate for water with toxic pollutants that cannot be discharged elsewhere, although some contractors will accept clean water. This option would be feasible if the water were polluted in a manner that makes it more cost effective to transport the water off site than to treat it for discharge at the site.

### 3.6.4 Advantages

- Can be used to dispose of highly polluted water, including water polluted with hazardous materials.
- No NPDES permit required, except that already held by the receiving facility.

### 3.6.5 Limitations

- May be very expensive (for treatment, hauling, and analytical testing).
- Requires time for testing.
- Not viable for prolonged periods of dewatering or for large volumes of water.
- On-site collection/storage area may require secondary containment and permitting.

### 3.6.6 General Requirements

- Chemical testing is required.
- Uniform hazardous waste manifests will be required if water is hazardous.
- Contact the CSWC for assistance with water that must be managed using this option.

Table 3-5. Use Assessment: Off-Site Treatment

|  |     |    |
|--|-----|----|
| 1. Answer the following questions to determine the feasibility of using this option:   |     |    |
| a. Is the water quality acceptable to the waste hauler?  | YES | NO |
| b. Is the water acceptable to the receiving facility?  | YES | NO |
| c. Can the estimated volume of water as calculated on the <b>Discharge Parameters</b> section of the <i>Water Quality and Discharge Parameters Assessment Form</i> (Appendix C) be hauled and can the volume of water be accommodated by the facility? | YES | NO |
| d. Can the costs and fees be afforded by the contract budget?  | YES | NO |
| 2. If you answered YES to all of the questions above, consider negotiating an agreement to transfer the dewatering waters to an off-site facility for treatment.   |     |    |
| 3. If you answered NO to any of the above questions, this option is not feasible for the site. Consider other management options.  |     |    |



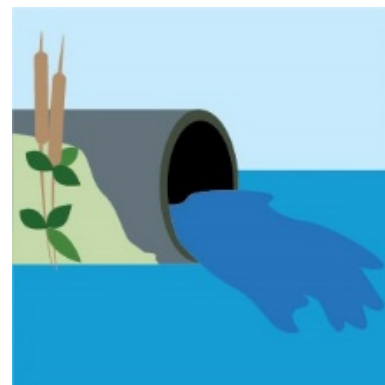
## 3.7 Discharge Accumulated Storm Water under the Construction General Permit

### 3.7.1 Definition

Discharges consisting solely of accumulated precipitation may be discharged to a storm drain or surface water under the Construction General Permit.

### 3.7.2 Implementation

The flow chart in Figure 2-1 (Section 2.0) provides guidance for determining if accumulated storm water can be discharged using this option. Figure 3-1 provides further guidance once this option is selected.



### 3.7.3 Water Quality

Water must be free of pollutants other than sediment and must consist solely of accumulated precipitation.

To prevent contamination by pollutants, Caltrans standards require that non-stormwater discharges shall not be made within 50 feet of potential pollutants.<sup>xxvii</sup>

### 3.7.4 Advantages

- Can be discharged directly from the project site following sediment treatment (if required).
- Minimal cost.

### 3.7.5 Limitations

- Must meet water quality requirements.
- May require treatment for sediment.
- Accumulated storm water discharges must meet the following Caltrans-specified limits; turbidity must not exceed 200 NTU; and, pH must be between 6.7 and 8.3.<sup>xxviii</sup>

### 3.7.6 General Requirements

Discharges of accumulated storm water under the Construction General Permit must meet effluent standards, receiving water limitations, and monitoring requirements.<sup>xxix</sup> These standards and requirements depend on the risk level of the construction site.

Narrative effluent standards apply to storm water. These standards prohibit the discharge of hazardous substances<sup>xxx</sup> above reportable quantities (as defined by the EPA) and require that dischargers minimize or prevent pollutants in discharges through the use of BMPs or Active Treatment Systems (ATS).<sup>xxxi</sup>

- Discharge of accumulated storm water must not adversely affect human health or the environment; must not contain pollutants at a level that will threaten to cause pollution or a public nuisance; must not cause or contribute to an exceedance of any applicable water quality standard; and, must comply with the receiving water TMDL requirements, if the TMDL for the receiving water identifies “construction activity” or land disturbance as a source of pollution.
- Discharges of accumulated storm water from risk level 1 construction sites are only required to meet narrative effluent standards and BMPs must be used to minimize or control pollutants.
- In addition to effluent standards, the discharge of accumulated storm water from risk level 1 construction sites must meet certain monitoring standards. Discharges of accumulated storm water

must not contain visible pollutants; however, minor discoloration is allowed if caused only by sediment. Discharges cannot occur if the accumulated storm water is known to have come in contact with construction materials.<sup>xxxii</sup> Visual monitoring of accumulated storm water is required where the rain event that caused the storm water accumulation produced at least ½ an inch of precipitation.<sup>xxxiii</sup>

- Risk level 2 dischargers must sample and provide analysis of all off-site discharges for pH and turbidity (effluent samples), unless doing so would be unsafe or would occur after business hours. A minimum of 3 samples per day is required for each qualifying rain event.
- A qualifying rain event is “one producing precipitation of ½ inch or more of discharge.”
- Risk level 3 dischargers must collect effluent samples, as described above for risk level 2 dischargers. A risk level 3 discharger may also have to conduct receiving water sampling if a receiving water monitoring trigger<sup>xxxiv</sup> is exceeded. When this occurs, turbidity or pH (if applicable) may have to be analyzed.
- Discharge only water that is visibly clear (minor discoloration due to sediment allowed) or water treated using appropriate BMPs to prevent impacts to receiving waters. Methods and technologies for sediment removal are described in Appendix B.
- Removed sediments must be handled properly. Retained sediment must be either dispersed onsite and stabilized, or disposed at a location approved by the Resident Engineer.
- Prevent erosion at the discharge point. Implement appropriate BMPs such as “Outlet Protection/Velocity Dissipation Devices” (BMP SS-10; Caltrans Construction Site BMPs Manual).
- Monitor discharge regularly to assure BMP effectiveness. Use Dewatering Operations Monitoring Form provided in Appendix C to record observations.
- Maintain monitoring records with the SWPPP or WPCP.

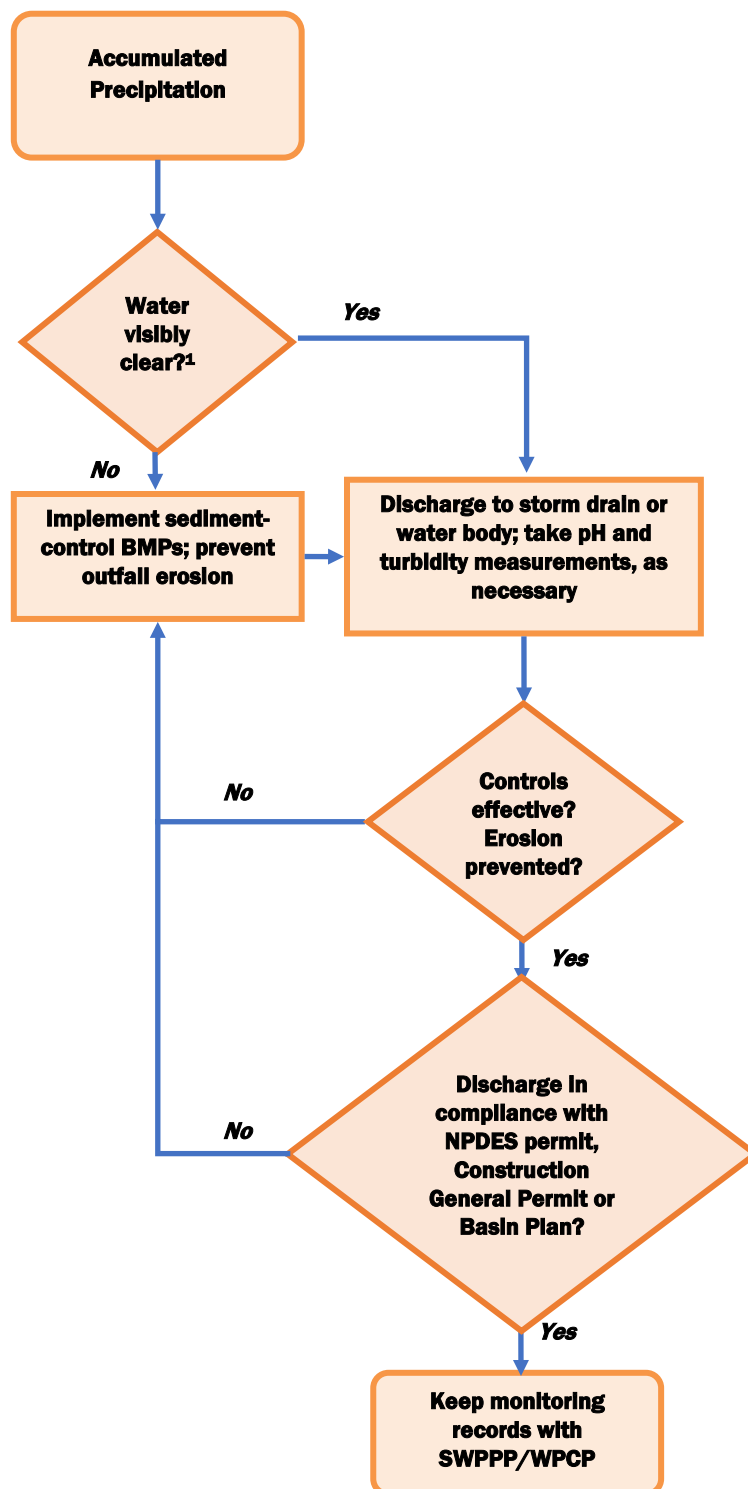


Figure 3-1. Accumulated Precipitation Discharge under the Construction General Permit

<sup>1</sup> Minor discoloration is allowed if caused only by sediment

## 3.8 Discharge Authorized Non-Storm Water under the Construction General Permit

### 3.8.1 Definition

Discharges of authorized non-storm water may be discharged to a storm drain or water body under the Construction General Permit.

### 3.8.2 Implementation

The flow chart in Figure 2-1 (Section 2.0) provides guidance for determining if authorized non-storm water can be discharged using this option.

### 3.8.3 Water Quality

The following receiving water limitations must be met, the discharge: must not adversely affect human health or the environment; must not contain pollutants that will threaten to cause pollution or a public nuisance; must not cause or contribute to an exceedance of an applicable water quality standard; and, must comply with the receiving water TMDL requirements. To prevent contamination by pollutants, Caltrans standards require that non-stormwater discharges not be made within 50 feet of potential pollutants.<sup>xxxv</sup>

### 3.8.4 Advantages

Simplified permitting requirements.

### 3.8.5 Limitations

- Must meet the requirements of the Construction General Permit.
- Detailed analysis may be required to determine compliance with the Construction General Permit.

### 3.8.6 General Requirements

Discharges of non-storm water under the Construction General Permit must meet effluent standards, receiving water limitations, and monitoring requirements.<sup>xxxvi</sup>

Narrative effluent standards, which apply to authorized non-storm water, prohibit the discharge of hazardous substances<sup>xxxvii</sup> above reportable quantities (as defined by the EPA) and require that dischargers minimize or prevent pollutants in discharges through the use of BMPs or an ATS.<sup>xxxviii</sup>

- Conduct dewatering in accordance with “Dewatering Operations” BMPs (BMP NS-2; *Caltrans Construction Site BMPs Manual*); include these BMPs in the project SWPPP or WPCP.
- As identified in Figure 2-1, Dewatering Operations Management Flow Chart, assess water quality and estimate discharge parameters to assure that the water meets water quality requirements and limitations on quantity. Refer to Sections 2.1 through 2.3, and the Water Quality and Discharge Parameters Assessment Form (Appendix C) for guidance.
- Removed sediments must be handled properly. Retained sediment must be either dispersed onsite and stabilized, or disposed at a location approved by the Resident Engineer.
- Prevent erosion at the discharge point. Implement appropriate BMPs such as “Outlet Protection/Velocity Dissipation Devices” (BMP SS-10; *Caltrans Construction Site BMPs Manual*).
- Monitor discharge regularly to assure BMP effectiveness. Use the Dewatering Operations Monitoring Form provided in Appendix C to record observations.
- Maintain monitoring records with the SWPPP or WPCP.
- For minor non-storm water discharges, provide monitoring results to the Regional Board, if required.

## 3.9 Discharge Water under a Regional Board General NPDES Permit or Site-Specific NPDES Permit

### 3.9.1 Definition

Discharge to a storm drainage system or surface water in accordance with a general NPDES permit or site-specific NPDES permit issued by a Regional Board.

### 3.9.2 Implementation

Requires applying for permission to discharge under the applicable general NPDES permit or applying for a site-specific permit.<sup>xxxix</sup> The flow chart in Figure 3-2 provides general guidance for the implementation process for this management option. Regional Board permits that may apply within each District are listed in Table 1-1 and are provided in Appendix D. Permit options and requirements vary by Region, as summarized in Appendix A. The Resident Engineer, with the assistance of the CSWC, should review the conditions contained within the appropriate general NPDES permit.

### 3.9.3 Water Quality

- Appropriate for water free of pollutants other than sediment.
- Water with pollutants other than sediment may be discharged by permission of the Regional Board, and treatment may be required.

### 3.9.4 Advantages

- Can be discharged directly from the project site.
- Appropriate for small to large quantities of water.

### 3.9.5 Limitations

- Permit application and approval may take several months.
- Discharged water must meet permit water quality requirements.
- Treatment for sediment or other pollutants may be required.
- Pre-discharge testing, monitoring, and reporting to be conducted in accordance with permit.
- Effluent and receiving water body testing may be costly and extensive.

### 3.9.6 General Requirements

- Consult with the CSWC for general NPDES permit application and compliance assistance.
- Test, manage, and monitor the discharge in accordance with the Regional Board permit.
- Appendix A provides summary information about General Permits in each Region. Copies of the General NPDES Permits are provided as Appendix D of the Dewatering Guide.
- Sediment treatment may be required. Methods and technologies for sediment removal are described in Appendix B.
- Conduct dewatering in accordance with “Dewatering Operations” BMPs (BMP NS-2; *Caltrans Construction Site BMPs Manual*); include these BMPs in the project SWPPP or WPCP.
- Prevent erosion at the discharge point. Implement appropriate BMPs such as “Outlet Protection/Velocity Dissipation Devices” (BMP SS-10; *Caltrans Construction Site BMPs Manual*).

## 3.10 Discharge Water to Land under the Statewide Low-Threat Discharge WDRS

### 3.10.1 Definition

A discharger can seek coverage under the statewide low-threat discharge WDRs, WQO-2003-0003-DWQ, when a Regional Board low threat discharge permit or waiver does not apply. The statewide low-threat discharge WDRs was issued by the SWRCB, but is implemented by the Regional Boards.

### 3.10.2 Implementation

The discharger evaluates the discharge against the requirements of the WDR, and if the discharge is found to fall within the requirements of the WDR, coverage can be sought.

### 3.10.3 Water Quality

- Appropriate for dischargers meeting the requirements of the statewide low-threat general WDRs.

### 3.10.4 Advantages

- Fewer regulatory requirements.

### 3.10.5 Limitations

- The discharge can only be to land. Discharge cannot be to a surface water, storm drain system, Water of the State of California, or water of the U.S.

### 3.10.6 General Requirements

- Consult with the CSWC for assistance in applying for and complying with the statewide low-threat discharge WDRs.

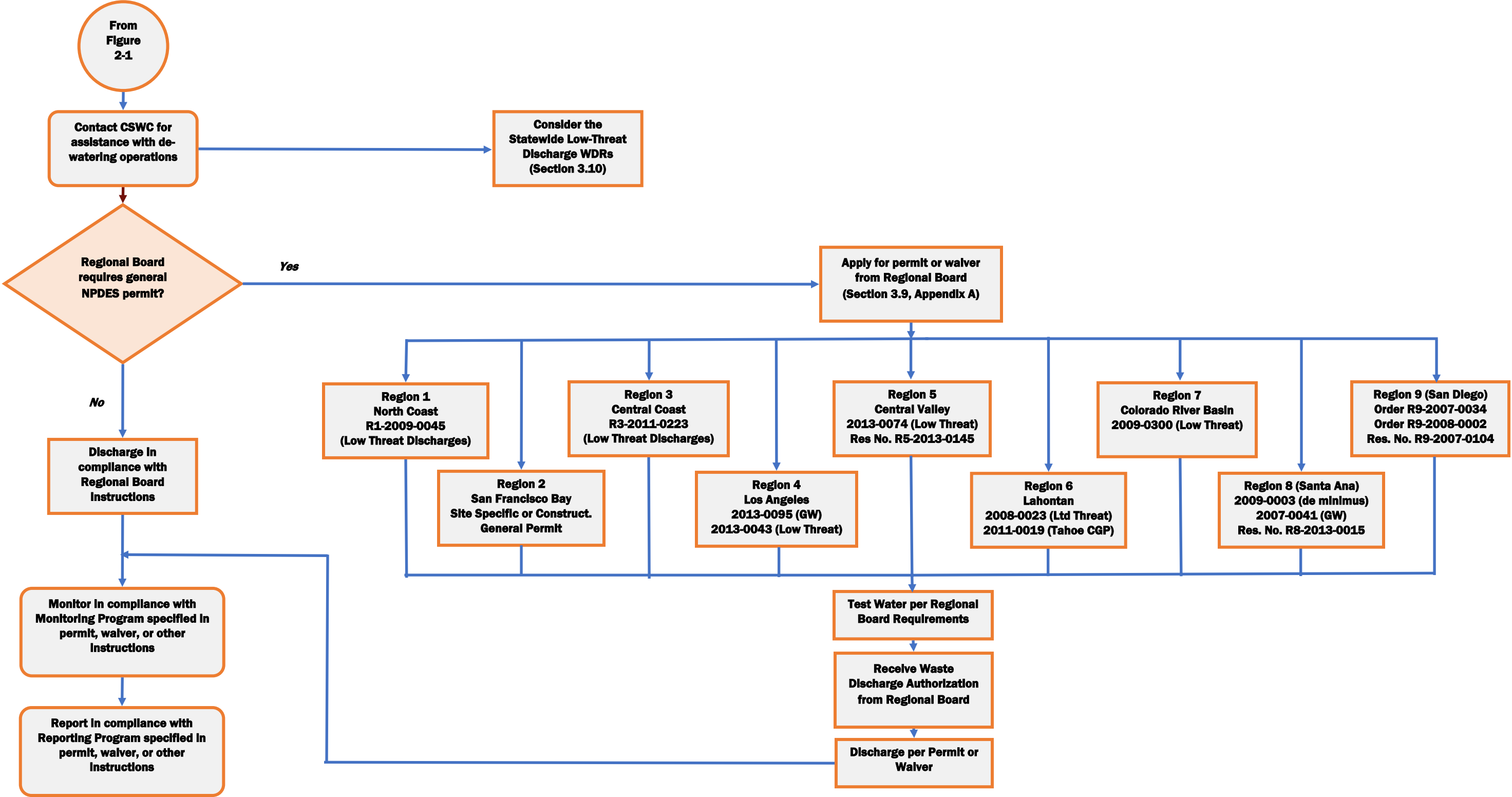


Figure 3-2. General Dewatering Process under a Regional Board General NPDES Permit or Wavier

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## Appendix A: Regional Board Dewatering Permit Requirements, Regional Board Contacts, Maps of Regional Boards and Caltrans District Boundaries

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## Appendix A

# Dewatering Permit Requirements for each Regional Board

The following sections describe the dewatering requirements for each Regional Board. Figure A-1 shows the Regional Boards and related Caltrans Districts.

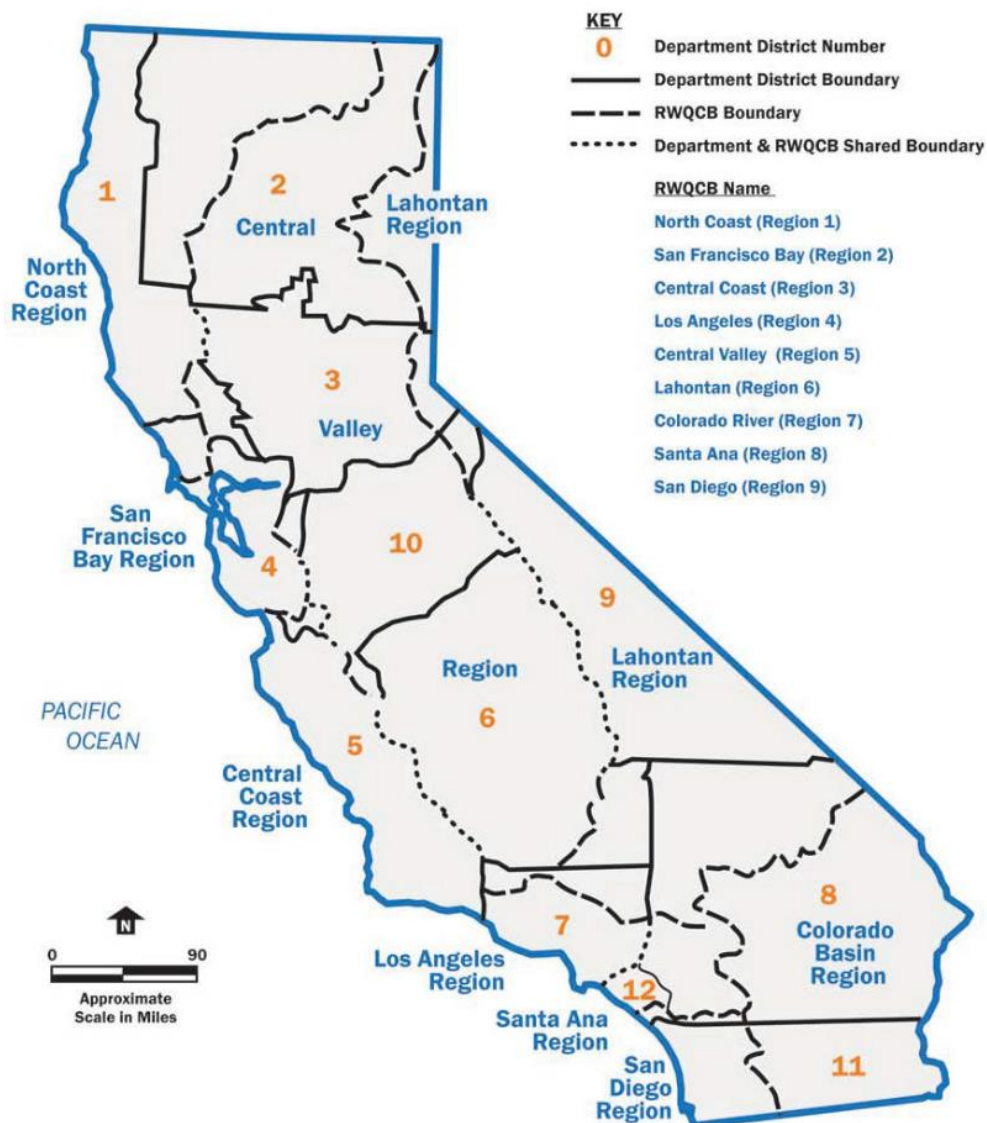
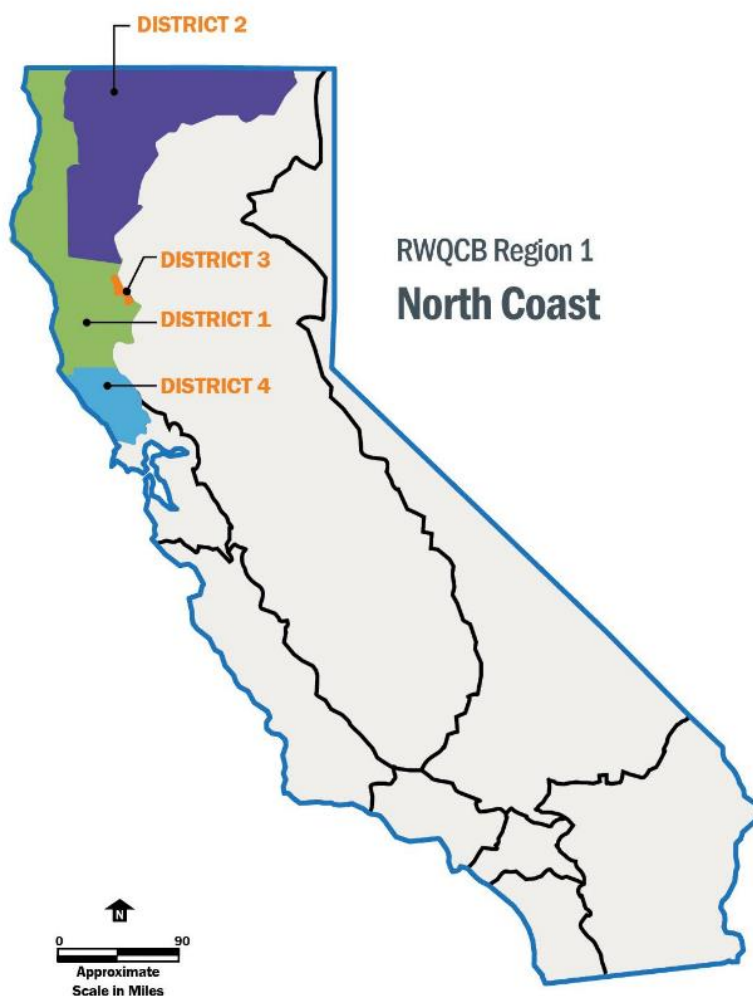


Figure A-1. Map of California showing Regional Board and Caltrans District Boundaries

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## A.1 Region 1. North Coast

|                     |   |
|---------------------|---|
| Caltrans Districts  | 1, 2, 3, 4  |
| Counties            | District 1: Del Norte, Humboldt, northern Lake, Mendocino<br>District 2: Northwestern Modoc, western Siskiyou, Trinity<br>District 3: Northwestern Glenn<br>District 4: Northern Sonoma |
| Contact Information | 5550 Skylane Blvd., Suite A<br>Santa Rosa, CA 95403<br>(707) 576-2220 <sup>xl</sup>   |



### A.1.1. NPDES Permitting Requirements for Dewatering Discharges

Accumulated precipitation can be discharged following the requirements of the Construction General Permit (See Section 3.7). Dewatering discharges, where sediment and naturally-occurring pollutants are the only substances, can be authorized under the Region 1 low threat general permit. Those discharges not meeting the requirements of the Region 1 low threat general permit may seek coverage under the Construction General Permit (for discharges to a waterbody), statewide low-threat discharge WDRs (for discharges to land; See Section A.10), or a site-specific permit.

### A.1.2. General NPDES Permit

|                                |  |  |
|--------------------------------|--|--|
| <b>Permit</b>                  | <b>Order No.</b>   | R1-2009-0045 <sup>xli</sup>  |
|                                | <b>Title</b>   | General NPDES Permit No. CA0024902 Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region  |
|                                | <b>Covers</b>  | Construction dewatering where sediment and naturally occurring substances in groundwater are the only pollutants of concern. <sup>xlii</sup> Additionally, low threat discharges to surface waters of the North Coast Region are covered. <sup>xliii</sup> |
| <b>How to Apply</b>            | Submit the Notice of Intent (NOI) to Comply with General Terms of NPDES Permit and first annual fee <sup>xliv</sup> . The NOI must be accompanied by a Best Management Practices and Pollution Prevention Plan. For new discharges, the NOI must be submitted 90 days prior to discharge, unless a request is made to expedite the review.   |  |
|                                | When the Regional Board has completed its review of the NOI, it will provide a written notice to the discharger. <sup>xlv</sup> If that written notice indicates that the proposed discharge is eligible for coverage under the General Permit, a 30-day public comment period will begin. At the end of the 30-day period, the discharger will again be informed in writing. If no significant comments were received, the Regional Board will grant coverage under the General Permit. <sup>xlvi</sup> The discharge of the wastewater must be necessary. If the discharge is not necessary, coverage under the general permit may be denied or revoked. |  |
| <b>General Requirements</b>    | Monitoring and reporting as required by the Monitoring and Reporting Program contained in Attachment E to the general NPDES permit.  |  |
| <b>Additional Requirements</b> | If the proposed project involves the discharge of groundwater, the applicant must contact the North Coast Region's Cleanups Unit to determine if a groundwater contamination source is located within ½ mile of the project site.  |  |
|                                | Receiving stream flow limitations must be met for the Mad, Eel, and Russian Rivers. The discharge flow rate to these rivers must be one percent or less of the receiving stream flow, unless an exception is granted. <sup>xlvii</sup>   |  |

## A.2 Region 2. San Francisco Bay

|                            |   |
|----------------------------|---|
| <b>Caltrans District</b>   | 4   |
| <b>Counties</b>            | District 4: Western Alameda, western Contra Costa, Marin, western Napa, San Francisco, San Mateo, northern Santa Clara, western Solano, southern Sonoma |
| <b>Contact Information</b> | 1515 Clay Street, Suite 1400<br>Oakland, CA 94612<br>(510) 622-2300 <sup>xlvi</sup>   |



### A.2.1. NPDES Permitting Requirements for Dewatering Discharges

Region 2 does not have a general NPDES permit that regulates dewatering discharges.

Accumulated precipitation can be discharged following the requirements of the Construction General Permit (See Section 3.7).

Additionally, for non-storm water dewatering discharges, the construction project may seek coverage under the Construction General Permit (for discharges to a waterbody), statewide low-threat discharge WDRs (for discharges to land; See Section A.10), or a site-specific permit.

### A.2.2. Site-Specific NPDES Dewatering Permits

|                             |   |
|-----------------------------|---|
| <b>How to Apply</b>         | Applicant for a site-specific permit (or written authorization) must have been denied permission to discharge to the local sanitary sewer or the discharge cannot be regulated under the Construction General Permit or the Statewide low-threat discharge WDRs (see Section A.10). |
| <b>General Requirements</b> | Monitoring and reporting as required by the Regional Board. Discharge and receiving water requirements, including water quality objectives, discharge prohibitions, and TMDLs, are defined in the Basin Plan. <sup>xlix</sup>   |



## A.3 Region 3. Central Coast

|                     |  |
|---------------------|--|
| Caltrans Districts  | 4, 5, 7  |
| Counties            | District 4: Southern Santa Clara<br>District 5: Western San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Monterey<br>District 7: Northwestern Ventura |
| Contact Information | 895 Aerovista Place, Suite 101<br>San Luis Obispo, CA 93401<br>(805) 549-3147 <sup>1</sup>   |



### A.3.1. NPDES Permitting Requirements for Dewatering Discharges

Accumulated precipitation can be discharged following the requirements of the Construction General Permit (See Section 3.7). Dewatering discharges, where sediment and naturally-occurring pollutants are the only substances, can be authorized under the Region 3 low threat general permit. Those discharges not meeting the requirements of the Region 3 low threat general permit may seek coverage under the Construction General Permit (for discharges to a waterbody), statewide low-threat discharge WDRs (for discharges to land; See Section A.10), or a site-specific permit.

### A.3.2. General NPDES Permit

|                             |  |  |
|-----------------------------|--|--|
| <b>Permit</b>               | <b>Order No.</b>   | R3-2011-0223   |
|                             | <b>Title</b>   | National Pollutant Discharge Elimination System (NPDES) Permit No. CAG993001, General Permit for Discharges with Low Threat to Water Quality   |
|                             | <b>Covers</b>  | Intermittent construction dewatering where the flow is less than 0.1 million gallons per day (mgd) and the duration is less than one year. <sup>li</sup> Continuous construction dewatering may be allowed if the discharge flow is less than 0.05 mgd. <sup>lii</sup> |
| <b>How to Apply</b>         | Submit the Notice of Intent (NOI) to Comply with General Terms of NPDES Permit and first annual fee. The NOI must include analytical results of the water to be discharged. Alternatively, analytical results from similar construction sites may be provided. <sup>liii</sup> |  |
| <b>General Requirements</b> | Monitoring and reporting as required by the Monitoring and Reporting Program contained in Attachment B to the general NPDES permit.  |  |

## A.4 Region 4. Los Angeles

|                     |  |
|---------------------|--|
| Caltrans Districts  | 7  |
| Counties            | District 7: Los Angeles (except northeastern portion), Ventura (except northwestern portion) |
| Contact Information | 320 W. 4th Street, Suite 200<br>Los Angeles, CA 90013<br>(213) 576-6600 <sup>liv</sup>       |



### A.4.1. NPDES Permitting Requirements for Dewatering Discharges

Accumulated precipitation can be discharged following the requirements of the Construction General Permit (See Section 3.7). Discharges of non-storm water, or storm water containing pollutants other than sediment, require a dewatering permit from the Regional Board. The Regional Board has issued two general NPDES dewatering permits, one for the discharge of water requiring treatment and another for the discharge of water that does not require treatment.

### A.4.2. General NPDES Permits

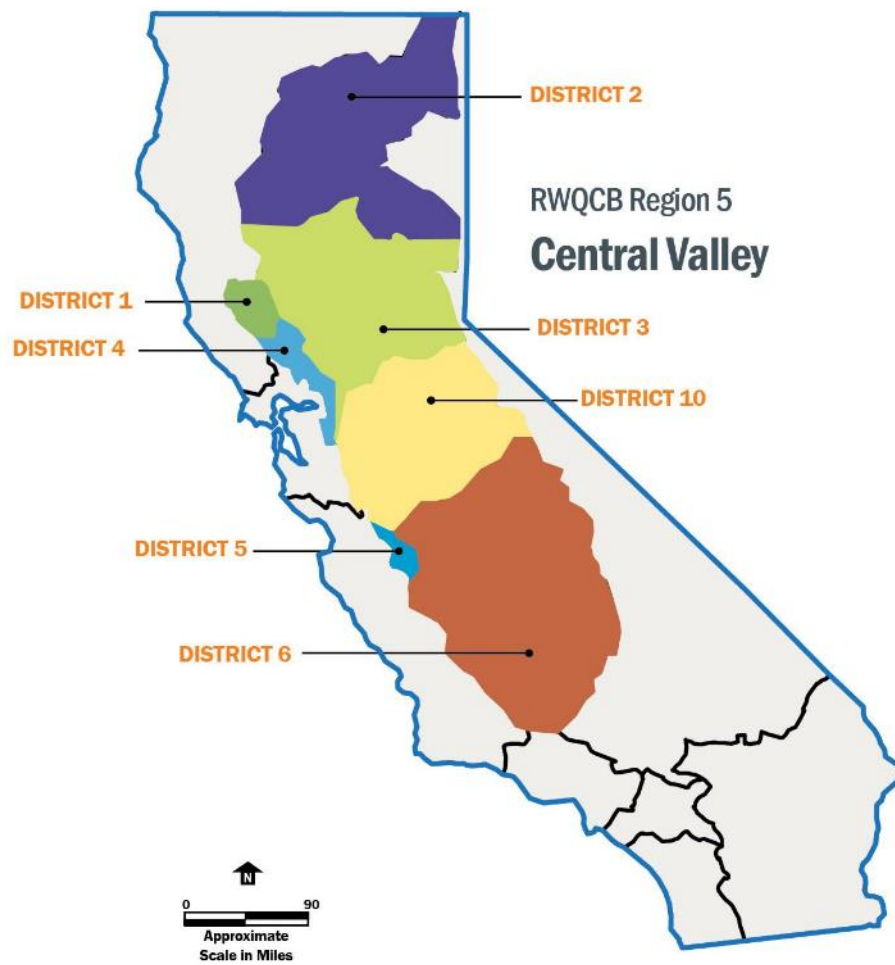
|                             |   |   |
|-----------------------------|---|---|
| <b>Permits</b>              | <b>Order No.</b>  | R4-2013-0043  |
|                             | <b>Title</b>  | General NPDES Permit No. CAG914001 Waste Discharge Requirements for Discharges of Treated Groundwater from Investigation and/or Cleanup of Volatile Organic Compounds-Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties  |
|                             | <b>Covers</b>   | Treated water from construction dewatering activities at a site impacted by volatile organic compounds (VOCs) only and subterranean seepage dewatering. Does not include water that may cause chronic or acute toxicity in receiving waters.  |
|                             | <b>Order No.</b>  | R4-2013-0095  |
|                             | <b>Title</b>  | General NPDES Permit No. CAG994004 Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties  |
|                             | <b>Covers</b>   | Treated or untreated waste water from permanent or temporary dewatering operations and other similar waste waters. Does cover waters containing toxic pollutants (not otherwise covered in the permit). Contaminants requiring treatment may include oil, solids, salts, sewage, chemicals, and hydrocarbons. |
| <b>How to Apply</b>         | <p>Submit the Notice of Intent (NOI) to comply with the permit and application fee at least 45 days prior to commencement of discharge.</p> <p>Order No. R4-2013-0043: NOI should include the following: feasibility study on alternative wastewater use, untreated groundwater analytical data, and any other information the Regional Board deems appropriate.</p> <p>Order No. R4-2013-0095: NOI should include the following: feasibility study on alternative wastewater use, treatment system description (and treatment chemicals); additional information if creekside dewatering will occur.</p> |   |
| <b>General Requirements</b> | Monitoring and reporting as defined in the Monitoring and Reporting Program specifications included in the transmittal for enrollment under the permit.   |   |

## A.5 Region 5. Central Valley

|                           |   |
|---------------------------|---|
| <b>Caltrans Districts</b> | 1, 2, 3, 4, 5, 6, 10  |
| <b>Counties</b>           | <b>REDDING</b><br>District 2: Western Lassen, western Modoc (except northwestern portion), Plumas, Shasta, southeastern Siskiyou Tehama<br>District 3: Butte<br><b>SACRAMENTO</b><br>District 1: Southern Lake<br>District 3: Colusa, Glenn (except northwestern portion), western El Dorado, western Nevada, western Placer, Sacramento, western Sierra, Sutter, Yolo, Yuba<br>District 4: Eastern Alameda, eastern Contra Costa, eastern Napa, eastern Solano<br>District 10: Western Alpine, Amador, Calaveras, San Joaquin, Stanislaus, Tuolumne<br><b>FRESNO</b><br>District 6: Fresno, Kings, western Kern, Madera, Tulare<br>District 10: Mariposa, Merced |

### Contact Information

|                   |  |               |  |
|-------------------|--|---------------|--|
| <b>Redding</b>    | 415 Knollcrest Drive <sup>lv</sup><br>Redding, CA 96002<br>(530) 224-4845                          | <b>Fresno</b> | 1685 "E" Street <sup>lvi</sup><br>Fresno, CA 93706<br>(559) 445-5116 |
| <b>Sacramento</b> | 11020 Sun Center Drive, <sup>lvii</sup><br>Suite 200<br>Rancho Cordova, CA 95670<br>(916) 464-3291 |               |  |



### A.5.1. NPDES Permitting Requirements for Dewatering Discharges

Accumulated precipitation can be discharged following the requirements of the Construction General Permit (See Section 3.7). A discharge to a surface water in Region 5 of less than 0.25 mgd and having a duration of less than 4 months can be permitted under the Region 5 low threat permit, Order No. R5-2013-0074. Certain discharges to land are allowed either under the Regional Board's waiver for discharges to land or the statewide low-threat discharge WDRs.

### A.5.2. General NPDES Dewatering Permit

|                              |  |  |
|------------------------------|--|--|
| <b>Permit:</b>               | <b>Order No.:</b>  | R5-2013-0074   |
|                              | <b>Title</b>   | NPDES No. CAG995001 Waste Discharge Requirements for Dewatering and Other Low Threat Discharges to Surface Waters  |
|                              | <b>Covers:</b>   | For miscellaneous public and private businesses discharging clean or relatively pollutant-free wastewater that (1) lasts four months or less in duration, or (2) for which the average dry weather discharge does not exceed 0.25 mgd. Such discharges includes construction dewatering. Does not cover discharges from groundwater cleanup operations or discharges from cleanup of groundwater caused by industrial activities not related to the construction activity. |
| <b>How to Apply:</b>         | Submit Notice of Intent (NOI) and annual fee. Include with the NOI the following information: an evaluation of reclamation options; the discharge location; a map showing the location of the site, treatment system (if applicable), discharge point(s), and receiving water; narrative and schematic descriptions of the treatment system; and, analysis of the proposed effluent for pollutants listed in Attachments B and C of the permit, and any applicable 303(d) listed pollutants for the receiving water. If the discharge is deemed eligible for coverage, the Executive Officer issues a Notice of Applicability (NOA). |  |
| <b>General Requirements:</b> | Monitoring and reporting required as defined in Attachment E –Monitoring and Reporting Program of the general NPDES permit. Requirements are based on the duration of the discharge (i.e., greater than or less than four months).   |  |

### A.5.3. Waiver for Discharges to Land

|                |   |  |
|----------------|---|--|
| <b>Waiver:</b> | <b>Resolution No.:</b>                        | R5-2013-0145   |
|                | <b>Title</b>                                  | Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge within the Central Valley Region                         |
|                | <b>Covers:</b>                                | Item 1: good quality and limited volume/duration construction dewatering discharges<br>Item 2: water recycling for construction purposes and road dust control |
|                | <b>Waiver of Waste Discharge Requirements</b> | Item 1: yes, conditional waiver of waste discharge requirements based on compliance with terms of waiver<br>Item 2: same as Item 1                             |

**Submit Report of Waste Discharge**

Item 1: report of waste discharge (RWD) is required in some instances, contact the Regional Board

Item: 2: no requirement to submit RWD

**How to Apply**

Item 1: No filing fee is required, but a RWD may be required. If a RWD is required, it should document that the discharge is of such good quality and is limited in volume and duration. The RWD must also indicate that the discharge will comply with the conditions of the waiver. The Regional Board Executive Officer will issue a Notice of Applicability (NOA); when the discharge is complete, the discharger submits a Notice of Termination (NOT). For those construction dewatering discharges that are not of good quality or are limited in volume or duration, coverage under the Statewide low-threat discharge WDRs, WQO-2003-0003-WDQ, is required (see Section A.10).

Item 2: submit a filing fee<sup>lviii</sup> and a Report of Water Recycling that documents that the discharge will comply with the conditions of the waiver. The Regional Board Executive Officer will issue a Notice of Applicability (NOA); when the discharge is complete, the discharger submits a Notice of Termination (NOT).

**General Requirements**

See Attachment A to the Waiver.

Item 1: must have a limited volume and duration of no more than a few weeks; the impoundment to which the water is discharged must have a low risk nuisance; and, the water must infiltration/evaporate within 72 hours.

Item 2: recycled water be treated to Title 22<sup>lix</sup> standards (i.e., hazardous waste standards) by permitted water recycled water producer; the user of the water must certify that 1) the discharge will conform to: Title 22 standards, and the California Department of Public Health Guidelines<sup>lx</sup>, and 2) the use has been approved by local and State of California Health Departments.



## A.6 Region 6. Lahontan

**Caltrans Districts** 2, 3, 6, 7, 8, 9, 10

**Counties**

**NORTH LAHONTAN BASIN**

District 2: Eastern Lassen, Modoc

District 3: Eastern El Dorado, eastern Nevada, eastern Placer, eastern Sierra

District 9: Northern Mono

District 10: Eastern Alpine

**SOUTH LAHONTAN BASIN**

District 6: Eastern Kern

District 7: Northeastern Los Angeles

District 8: Northern San Bernardino

District 9: Inyo, southern Mono



## Contact Information

### North Lahontan Basin<sup>lxi</sup>

2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA 96150  
(530) 542-5440<sup>lxiii</sup>

### South Lahontan Basin<sup>lxii</sup>

14440 Civic Drive, Suite 200  
Victorville, CA 92392  
(760) 241-6583<sup>lxiv</sup>

## A.6.1. NPDES Permitting Requirements for Dewatering Discharges

Accumulated precipitation can be discharged following the requirements of the Construction General Permit (See Section 3.7).

Discharges of relatively pollutant-free waters require a dewatering permit from the Regional Board. The Regional Board has issued a general NPDES dewatering permit, Order No. R6T-2008-0023, for these discharges. To obtain coverage under this permit, it must be shown that discharges to land are not feasible.

In addition to the statewide Construction General Permit, two other construction-related regulatory devices may apply in the Lahontan Region: the Lake Tahoe Construction General Permit and the Small Construction Project Waste Discharge Requirements (WDRs). The Small Construction Project WDRs allows dewatering discharges to land where the discharge contains no pollutants which may harm groundwater quality.

The Lahontan Basin Plan prohibits the disposal of wastewater to surface waters of the Lake Tahoe Hydrologic Unit.<sup>lxv</sup> For the Tahoe Basin, discharge of solid or liquid waste materials is prohibited to lands below the high-water rim of Lake Tahoe or within the 100-year floodplain of any tributary to Lake Tahoe.<sup>lxvi</sup>

Discharges not covered by the permits above can be regulated under the Construction General Permit (for discharges to a waterbody), statewide low-threat discharge WDRs (for discharges to land; See Section A.10), or a site-specific permit.

## A.6.2. General NPDES Permits

|                 |                   |  |
|-----------------|-------------------|--|
| <b>Permits:</b> | <b>Order No.:</b> | R6T-2008-0023  |
|                 | <b>Title:</b>     | NPDES No. CAG996001 Renewed Waste Discharge Requirements and National Pollutant Discharge Elimination System General Permit for Limited Threat Discharges to Surface Waters  |
|                 | <b>Covers:</b>    | Discharge to surface waters under this permit is only allowed when land disposal is not feasible. <sup>lxvii</sup> Discharge of clean or relatively pollutant-free water that “does not contain or produce significant quantities of pollutants that could adversely affect designated beneficial uses.” Such discharges include construction dewatering. Discharge flow rate is not necessarily a limiting factor in receiving coverage under this permit. <sup>lxviii</sup> Does not cover groundwater cleanup projects or discharges of industrial pollutants, chlorinated hydrocarbons, organic pollutants, toxics, etc. <sup>lxix</sup> |

|                             |  |
|-----------------------------|--|
| <b>How to Apply</b>         | Submit Notice of Intent (NOI) and fee, available analytical data about the discharge, and a BMP Plan (see Attachment E). <sup>lxx</sup> The BMP Plan must describe disposal practices to ensure compliance with the general NPDES permit. Issuance of a Notice of Authorization (NOA) by the Regional Board authorizes discharge under the permit. <sup>lxxi</sup> |
| <b>General Requirements</b> | Monitoring and reporting required as defined in Attachment C <sup>lxxii</sup> “Construction Site Monitoring and Reporting Program.”  |
| <b>Order No.:</b>           | R6T-2011-0019  |
| <b>Title:</b>               | NPDES No. CAG616002 General Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit, Counties of Alpine, El Dorado, and Placer  |
| <b>Covers:</b>              | Applies to certain areas of Caltrans District 3 and District 10 located within the Lake Tahoe Hydrologic Unit. Covers construction dewatering discharges to land. <sup>lxxiii</sup>  |
| <b>How to Apply</b>         | The legally responsible person (LRP) or approved signatory (typically the RE) certifies and files Permit Registration Documents (PRDs) through the Storm Water Multi-Application and Report Tracking System (SMARTS). <sup>lxxiv</sup> The discharger is covered under the Tahoe CGP once the Lahontan Regional Board issues a WDID number for the project.        |
| <b>General Requirements</b> | Monitoring and reporting required as defined in Attachment C “Construction Site Monitoring and Reporting Program.”   |

### A.6.3. General Waste Discharge Requirements

|                   |  |
|-------------------|--|
| <b>Order No.:</b> | R6T-2003-0004 <sup>lxxv</sup>  |
| <b>Title:</b>     | General Waste Discharge Requirements for Small Construction Projects, Including Utility, Public Works, and Minor Streambed/Lakebed Alteration Projects in the Lahontan Region Excluding the Lake Tahoe Hydrologic Unit   |
| <b>Covers:</b>    | <p>Applies to discharges from small construction projects (including dewatering waste discharges to land only) and discharges associated with minor streambed/lakebed alteration within the following hydrologic units: Little Truckee River (HU No. 636.00); Trucker River (HU No. 635.20); West Fork Carson River (HU No. 633.00); East Fork Carson River (HU No. 632.00); Mono (HU No. 601.00); and Long (HU No. 603.10).</p> <p>A small construction project is defined as “construction activity that results in land disturbance between 10,000 square feet and 1 acre.”<sup>lxxvi</sup> The streambed alteration/lakebed alteration allowed under this permit includes soil disturbing work within any water body in the Lahontan Region (not within the Lake Tahoe Hydrologic Unit) or within the 100-year floodplain of the Little Truckee River or the Truckee River that is not regulated by the Army Corps of Engineers. Certain exceptions may apply to these requirements (see Attachment F of the</p> |

general permit).

Dewatering waste discharges to a separate storm sewer or waters of the state are prohibited. Discharge to land of dewatering wastes are allowed as long as the discharge contains no pollutants that could degrade groundwater quality.

**How to Apply**

Submit NOI and fee, available analytical data about the discharge, and a BMP Plan describing temporary and permanent BMPs to prevent the discharge of waste during and after construction (see Attachment E). Coverage under the permit occurs when the Regional Board gives written notification or 30 days after the Regional Board receives the NOI.

**General  
Requirements**

Monitoring and reporting required as defined in the “Monitoring and Reporting Program.”

## A.7 Region 7. Colorado River Basin

|                            |   |
|----------------------------|---|
| <b>Caltrans Districts</b>  | 8, 11   |
| <b>Counties</b>            | District 8: Southern San Bernardino (except southwestern portion),<br>Riverside (except for far western portion)<br><br>District 11: Imperial, far eastern portion of San Diego |
| <b>Contact Information</b> | 73-720 Fred Waring Drive, Suite 100<br>Palm Desert, CA 92260<br>(760) 346-7491 <sup>lxvii</sup>   |



### A.7.1. NPDES Permitting Requirements for Dewatering Discharges

Accumulated precipitation can be discharged following the requirements of the Construction General Permit (See Section 3.7). Dewatering discharges are covered under the requirements of the Construction General Permit. If the construction site is small enough that the Construction General Permit does not apply, then certain discharges can be permitted under the Region 7 low threat permit, Order No. R7-2009-0300.<sup>lxxviii</sup> Additionally, coverage may be sought under the statewide low-threat discharge WDRs (see Section A.10).

### A.7.2. General NPDES Permit

|                             |   |   |
|-----------------------------|---|---|
| <b>Permit</b>               | <b>Order No.</b>  | R7-2009-0300  |
|                             | <b>Title</b>  | NPDES No. CAG997001 General Waste Discharge Requirements (WDRs) and General National Pollutant Discharge Elimination System (NPDES) Permit for Low Threat Discharges to Surface Waters within the Colorado River Basin Region   |
|                             | <b>Covers</b>   | Discharges of low threat wastewaters to surface waters of the Colorado River Basin Region. <sup>lxxix</sup> The permit also covers dewatering activities during the construction of pipelines. <sup>lxxx</sup> The construction site must be less than one acre. <sup>lxxxi</sup> |
| <b>How to Apply</b>         | Submit a completed Notice of Intent; results of wastewater sampling; proposed practices to comply with effluent limitations; Best Management Practices Plan or Control Strategy Plan; and filing fee. |   |
| <b>General Requirements</b> | Monitoring and reporting as required by the Monitoring and Reporting Program contained in Attachment E to the General Permit.   |   |

## A.8 Region 8. Santa Ana

|                            |   |
|----------------------------|---|
| <b>Caltrans Districts</b>  | 8, 12   |
| <b>Counties</b>            | District 8: Southwestern San Bernardino, far western Riverside (except southwestern portion)<br>District 12: Orange (except southern portion) |
| <b>Contact Information</b> | 3737 Main Street, Suite 500<br>Riverside, CA 92501<br>(951) 782-4130 <sup>lxxxii</sup>  |



### A.8.1. NPDES Permitting Requirements for Dewatering Discharges

Accumulated precipitation can be discharged following the requirements of the Construction General Permit (See Section 3.7).

Discharges of non-storm water, or storm water discharges containing pollutants other than sediment, require a general NPDES permit from the Regional Board. The Regional Board has issued a general NPDES dewatering permit under Order No. R8-2009-0003.<sup>xxxiii</sup> Additionally, certain dewatering discharges within the San Diego Creek/Newport Bay Watershed may seek coverage underneath Order No. R8-2007-0041. Although new permanent discharges may not be enrolled under this permit, temporary discharges may, under certain circumstances, be regulated under this permit. If selenium or nitrogen is not an issue in the discharge, then coverage under this permit may be possible.

In certain circumstances, the requirement for waste discharge requirements may be waived if the discharge is free of pollutants. See Resolution R8-2013-0015 for more information.

### A.8.2. General NPDES Permits

|               |                             |  |
|---------------|-----------------------------|--|
| <b>Permit</b> | <b>Order No.</b>            | R8-2009-0003   |
|               | <b>Title</b>                | NPDES No. CAG998001 General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (de minimus) Threat to Water Quality  |
|               | <b>Covers</b>               | De minimus discharges to surface waters (including construction dewatering wastes and dewatering wastes from subterranean seepage); discharges from diverted stream flows; and, other similar wastes posing minimal threat to water quality.   |
|               | <b>How to Apply</b>         | Submit Notice of Intent (NOI) Form 45 days before the start of a new discharge. Include a site characterization study which any onsite contaminants (petroleum hydrocarbons, solvents, metals, dissolved salts, etc.) as well as the subsurface conditions (geology; hydrology; extent of contamination, if any). Additionally, the location of any leaking underground tanks or other facilities that may impact the site and that are located within 200 feet must be included. A report must be prepared which has a list of potential contaminants in the discharge, flow rates, discharge location, a description of the treatment system (if any), the location of the affected receiving water, and a map showing the discharge and the receiving water. For additional requirements, see the permit. The Regional Board will issue a Discharge Authorization Letter on approval. |
|               | <b>General Requirements</b> | Monitoring and reporting required as defined in the “Monitoring and Reporting Program” specifications of the permit (Appendix E) and as defined in the Regional Board Discharge Authorization Letter.  |
|               | <b>Order No.</b>            | R8-2007-0041   |
|               | <b>Title</b>                | NPDES No. CAG918002 General Discharge Permit for Discharges to Surface Waters of Groundwater Resulting From Groundwater Dewatering Operations and/or Groundwater Cleanup Activities at Sites within the San Diego Creek/Newport Bay Watershed Polluted By Petroleum Hydrocarbons, Solvents, Metals and/or Salts.   |



|                             |   |
|-----------------------------|---|
| <b>Covers</b>               | The applicability of Order R8-2009-0003 has been extended by Order No. R8-2009-0045 and time extended by Order No. R8-2013-0060. Regulates discharges that pose an insignificant threat to water quality, including groundwater dewatering wastes at construction sites.  |
| <b>How to Apply</b>         | Submit Notice of Intent (NOI) Form 180 days before the start of a new discharge. Include a site characterization study which any onsite contaminants (petroleum hydrocarbons, solvents, metals, dissolved salts, etc.) as well as the subsurface conditions (geology; hydrology; extent of contamination, if any). An evaluation of potential selenium and nitrogen loading must be included. A report must be prepared which has a list of potential contaminants in the discharge, flow rates, discharge location, a description of the treatment system (if any), the location of the affected receiving water, a plan for the prevention of run-on and control of runoff, and a map showing the discharge and the receiving water. For additional requirements, see the permit. The Regional Board will issue a Discharge Authorization Letter on approval. |
| <b>General Requirements</b> | Monitoring and reporting required as defined in the “Monitoring and Reporting Program” specifications of the permit (Appendix E) and as defined in the Regional Board Discharge Authorization Letter.   |

### A.8.3. Waiver for Discharges to Land

|                             |  |   |
|-----------------------------|--|---|
| <b>Waiver</b>               | <b>Resolution No.</b>  | R8-2013-0015  |
|                             | <b>Title</b>   | Waiver of Waste Discharge Requirements for Specific Types of Discharges   |
|                             | <b>Covers</b>  | Groundwater dewatering to land <sup>lxxxiv</sup> where discharges do not affect water quality or beneficial uses (i.e., the discharge is free of pollutants). |
| <b>How to Apply</b>         | A Report of Waste Discharge must be submitted and then the Executive Officer will determine if the proposed discharge will meet the conditions specified in the waiver. If the Executive Officer makes this determination, discharge requirements are waived.  |   |
| <b>General Requirements</b> | The discharger must: 1) not create pollution or nuisance <sup>lxxxv</sup> ; 2) not cause a violation of any applicable water quality standard for receiving waters; 3) not discharge substances toxic to animal or plant life; and, 4) follow appropriate CEQA procedures if approval of the discharge must be approved by other agencies. |   |

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## A.9 Region 9. San Diego

|                     |   |
|---------------------|---|
| Caltrans Districts  | 8, 11, 12   |
| Counties            | District 8: Southwestern Riverside<br>District 11: San Diego (except far eastern portion)<br>District 12: Southern Orange |
| Contact Information | 2375 Northside Drive, Suite 100<br>San Diego, CA 92108<br>(619) 516-1990 <sup>lxxxvi</sup>                                |



### A.9.1. NPDES Permitting Requirements for Dewatering Discharges

Discharges consisting solely of storm water (accumulated precipitation) are regulated under the Construction General Permit.

Temporary discharges of groundwater extraction wastes to San Diego Bay, and its tributaries under tidal influence, from groundwater extraction due to construction and other groundwater extraction activities require enrollment under the Regional Board general NPDES Permit No. CAG919001 Order No. 2007-0034). Discharges to surface waters other than San Diego Bay of extracted groundwater require enrollment under the general NPDES Permit No. CAG919002 (Order No. R9-2008-0002). These permits are summarized below. While the original expiration date of both of these general permits have expired, these permits still apply because their expiration dates have been extended administratively.

Waste discharge requirements for certain types of discharges to land have been issued by the Regional Board. Conditional Waiver No. 2 covers low threat discharges of water to land including “discharges from short-term construction projects” where the extracted groundwater does not come from an area that contains contaminated soil or groundwater (Resolution No. R9-2007-0104).

For discharges associated with all other types of dewatering operations, contact the Regional Board for guidance.

### A.9.2. General NPDES Permits Regulating Groundwater Extraction Discharges to Surface Waters

|                |                  |  |
|----------------|------------------|--|
| <b>Permit:</b> | <b>Order No.</b> | R9-2007-0034   |
|                | <b>Title</b>     | General Waste Discharge Requirements for Discharges from Temporary Groundwater Extraction and Similar Waste Discharges to San Diego Bay, Tributaries Thereto under Tidal Influence, and Storm Drains or Other Conveyance Systems Tributary Thereto                           |
|                | <b>Covers</b>    | Discharges of extracted groundwater from construction dewatering, foundation dewatering, and groundwater remediation operations to San Diego Bay or storm drains/tributaries to San Diego Bay. Does not apply to permanent discharges.                                       |
|                | <b>Order No.</b> | R9-2008-0002   |
|                | <b>Title</b>     | General Waste Discharge Requirements for Groundwater Extraction and Similar Waste Discharges from Construction, Remediation, and Permanent Groundwater Extraction Projects to Surface Waters within the San Diego Region Except for San Diego Bay                            |
|                | <b>Covers</b>    | All groundwater extraction waste discharges to all surface waters within the San Diego Regional Board jurisdiction, except for discharges into the San Diego Bay or tributaries. This includes discharges that are less than 0.1 mgd. Does not cover storm water discharges. |

|                             |   |
|-----------------------------|---|
| <b>How to Apply</b>         | Complete the Notice of Intent to Comply, an initial sampling and monitoring report, project map(s) describing the essential features of the groundwater extraction system and indicating the location of the discharge, and application fee.  |
| <b>General Requirements</b> | Monitoring and reporting as required by the Monitoring and Reporting Program contained in Attachment E to the general permit. The Regional Board issues a Discharger's Notice of Enrollment which includes a flow limit, mass discharge limit, extra monitoring requirements (if any), and any other additional requirements. |

### A.9.3. Waiver for Construction Dewatering Discharges to Land

|                             |   |  |
|-----------------------------|---|--|
| <b>Waiver 2</b>             | <b>Resolution No.</b>   | R9-2007-0104 <sup>lxxxvii</sup>  |
|                             | <b>Title</b>  | Amendment to the Water Quality Control Plan for the San Diego Basin (9) to Incorporate the Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge within the San Diego Region |
|                             | <b>Covers</b>   | Conditional Waiver No. 2 covers short-term discharges from construction dewatering operations to land  |
| <b>How to Apply</b>         | For discharges of greater than 5,000 gallons per day for any continuous 180-day period, complete the Notice of Intent to Comply (NOI), and include the application fee, if any. The following must be included with the NOI: the name and address of the operator, the location of the discharge, how long the discharge will occur and the discharge rate, and, a description of measures to reduce or eliminate pollutants that might affect groundwater quality.             |  |
| <b>General Requirements</b> | Meet the conditions contained in Attachment A of Resolution R9-2007-0104, specifically 2.I.A. and 2.I.D. For discharges of greater than 5,000 gallons per day for any continuous 180-day period, an NOI must first be submitted; before the discharge can begin, sufficient information must be submitted that the discharge will comply with the conditional waiver. Discharged groundwater cannot originate from any location that contains contaminated soil or groundwater. |  |

## A.10 Statewide General WDRs for Low Threat Discharges to Land

|                              |  |   |
|------------------------------|--|---|
| <b>Permit:</b>               | <b>Order No.:</b>  | WQO-2003-0003-DWQ   |
|                              | <b>Title:</b>  | General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality  |
|                              | <b>Covers:</b>   | Discharges to land from small temporary dewatering projects from small construction projects, excavation projects, or dewatering of underground utility vaults. Coverage under the statewide low-threat discharge WDRs is not necessary if a Regional Board already has a waiver or individual WDR that applies to the construction site. |
| <b>How to Apply:</b>         | Submit to the appropriate Regional Board a NOI and first annual fee; a project map; evidence of compliance with CEQA; and, a discharge monitoring plan (pollutants, concentrations, monitoring locations and frequencies, and reporting).                              |   |
| <b>General Requirements:</b> | Monitoring and reporting as required by the Monitoring and Reporting Program contained in the statewide low-threat discharge WDRs. The Regional Board may have additional requirements based on the quality or quantity of the discharge or Regional Board basin plan. |   |

## Appendix B: Sediment Treatment Options

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## Appendix B

# Sediment Treatment Options

This appendix provides guidance on sediment treatment practices used during dewatering operations.

- The first section summarizes sediment treatment requirements.
- The second section considers questions that should be answered prior to selecting appropriate treatment options and compares the key features of various methods and technologies.
- The final section presents additional information about various technologies, including advantages/disadvantages, construction/implementation considerations, estimated costs, and maintenance requirements.

## B.1 Sediment Treatment Requirements

### B.1.1 When is Sediment Treatment Required for Dewatering Operations?

Sediment is the most common pollutant associated with dewatering operations on construction sites. When water is not visibly clear of sediment or when the dewatering operation may re-suspend sediments, one or more sediment treatment options may need to be implemented.

### B.1.2 How Much Sediment Removal is Required?

Sediment treatment requirements depend on how the contractor manages the effluent and the requirements of any NPDES permits and Regional Basin Plan requirements that regulate the dewatering discharge.

- If effluent is being retained on site (for infiltration, evaporation, dust control, irrigation, etc.), sediment treatment is not required, but may be necessary for protection/proper functioning of water trucks, etc.
- If effluent is being discharged to a storm drain or water of the U.S., the water must be treated for sediment in compliance with the authorizing NPDES permit.

### B.1.3 What are NPDES Permit Requirements for Sediment Removal?

Sediment treatment requirements are specific to the NPDES permit that authorizes the dewatering operation.

- For dewatering operations under the Construction General Permit, sediment treatment requirements are specified in the *Construction Site Best Management Practices (BMPs) Manual*, NS-2, Dewatering Operations. If water is not visibly clear, it must be treated using BMPs so that the discharge does not impact receiving water quality. However, some discoloration is allowed if the discoloration is due to sediment only<sup>lxxxviii</sup> and the water is below the appropriate NAL, NEL, or trigger.
- For dewatering authorized under a separate general NPDES permit issued by Regional Board, refer to the requirements specified in the permit. Maximum levels for turbidity, total suspended solids (TSS) or other related parameters for both the dewatering discharge and for the receiving water may be defined in the permit. For example, a typical turbidity limit contained in NPDES permits is that the dewatering discharge cannot exceed a turbidity level of 50 Nephelometric Turbidity Units (NTUs) and may not cause the background turbidity of the receiving water to be elevated by more than 10 percent.

## B.2 Selecting Appropriate Sediment Treatment Options

This section contains a series of questions that should be considered prior to selecting the sediment treatment options for dewatering operations on the construction site.

### B.2.1 What Type of Sediment is Present in the Water?

The size of particles present in the sediment is a key consideration for selecting the appropriate sediment treatment option(s).

- If the sediment consists primarily of gravel or sand, which are relatively large particles, a single treatment using a more basic technology, such as a weir tank, may be adequate.
- If the sediment consists of silt and/or clay, which are relatively small particles, the effluent will most likely need a more advanced technology, such as a sand media particulate filter or cartridge filter.
- If the sediment consists of a large spectrum of particle sizes, the water may need primary treatment to remove larger particles, followed by secondary treatment to remove finer particles.

Figure B-1 shows the estimated removal efficiencies for various sediment treatment technologies.

### B.2.2 What Site Conditions May Limit Sediment Treatment Selection?

The slope and accessibility of the treatment area may impose limitations on the selection of an appropriate system. The site should be evaluated to determine the most effective system layout, access, dewatering storage, pumping requirements (flow, pressure, duration, etc.), ancillary piping, backwash tanks, a low impact discharge system, and any other site-specific requirements.

The applicability and use of dewatering devices on a construction project are specific to the individual job and treatment needs. The vendors who rent and sell these products can provide assistance to engineer a dewatering management program to meet the specific job conditions. Multiple devices and treatment techniques may be necessary to meet the treatment criteria.

In order to treat the water to be discharged, the contractor will necessarily have to pump from a collection or storage area to the treatment unit(s). Therefore, storage tanks may be required as part of the system.

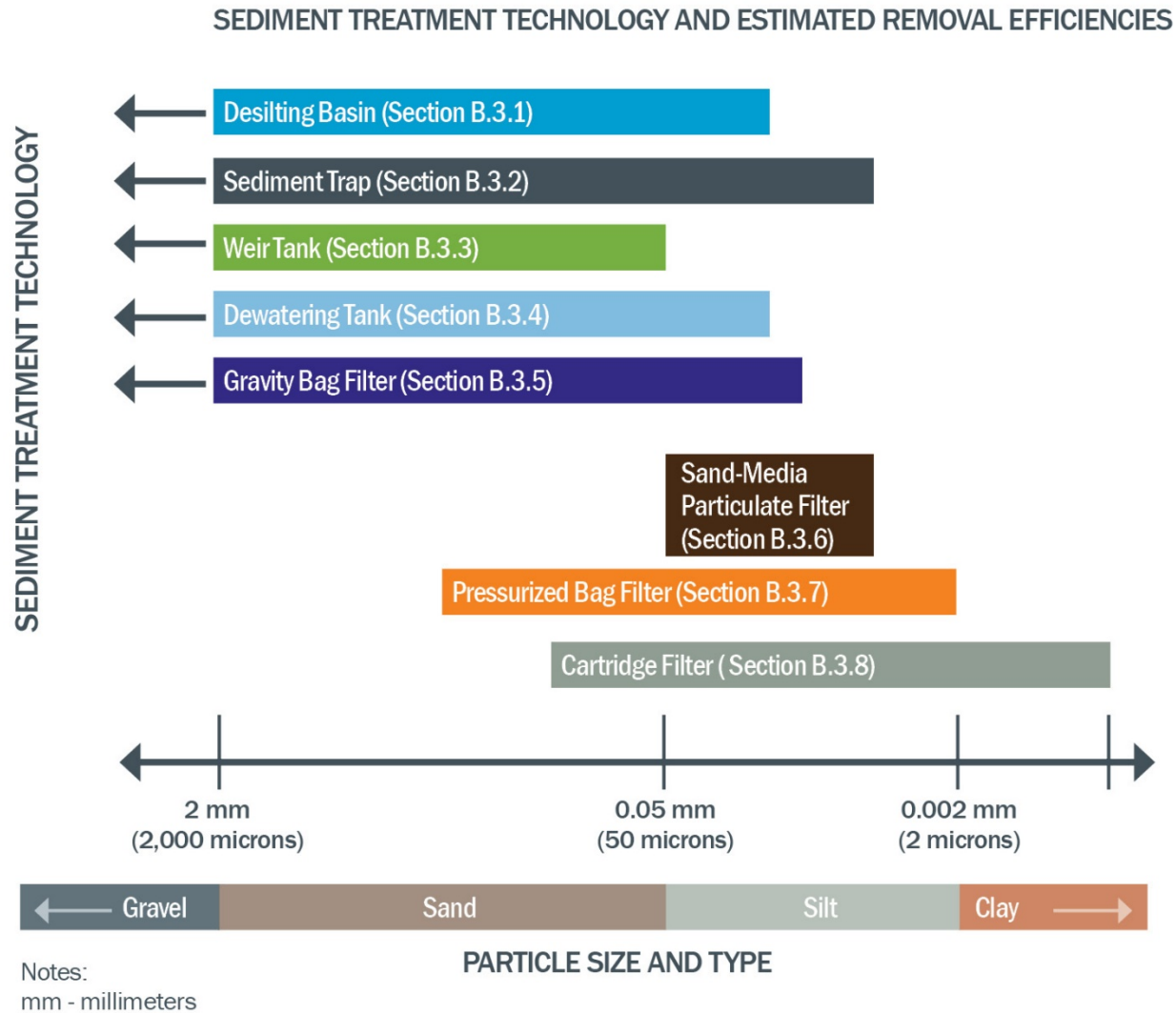
Pumps must be selected which match the project requirements as well as can operate within the parameters of the dewatering equipment. Pumps are selected depending on total dynamic head (how far and high the water is to be pumped), flow, availability of electrical power, amount of storage volume, and time constraints. Some pumps have a diesel or gasoline engine directly coupled to the pump on the skid/trailer, as well as a fuel tank. However, pumps with electric motors will require appropriate power from an electrical power supply or a portable generator. Pressurized bag, cartridge, and sand media filters require a power supply for operation. The vendor can provide further information about the power requirements.

### B.2.3 How Does Flow Rate Affect Sediment Treatment Selection?

Manufacturers' specifications identify the maximum flow rate that can be treated for sediment removal. For higher flows, operate multiple treatment systems, operated in parallel, might be necessary to treat the volume of effluent. Table B-1 shows the range of flow rates available for individual sediment treatment options.

### B.2.5 How Much do Sediment Treatment Systems Cost?

Table B-1 compares estimated costs associated with various sediment treatment methods and technologies. The estimated costs are based on 2014 values<sup>xxxxix</sup>. Transportation costs depend on site location relative to product distributors and are estimated to be approximately \$115 per hour.



**Figure B-1. Sediment Treatment Technology and Estimated Removal Efficiencies**

*This information is based on general manufacture's information.*

When projecting costs for sediment treatment, consider the need for implementing multiple systems for handling high flow rates or the cost of secondary treatment to remove fine particles.

### **B.2.6 What Sediment Treatment Options are Available?**

Table B-1 summarizes the features associated with some available sediment treatment methods and technologies. Each method/technology is described in more detail in Section B.3. The methods described in this appendix do not include all those available, but are representative of typical methods.

Table B-1. Comparison of Sediment Treatment Technologies

| Sediment Treatment Technology <sup>1</sup> | Pollutants Removed             | Flow Range (gpm)           | Footprint Area (ft <sup>2</sup> ) | Product Availability           | Equipment Required                    | Construction/Rental Cost                          | Maintenance Cost               | Other                          |
|--|--------------------------------|----------------------------|-----------------------------------|--------------------------------|---------------------------------------|---|--------------------------------|--------------------------------|
| Desilting Basin                            | Trash, sediment                | Varies by design           | Varies by design                  | Time to construct              | Excavation                            | \$15/ft <sup>2</sup>                              | --                             | Requires design                |
| Sediment Trap                              | Trash, sediment                | Varies by design           | Varies by design                  | Time to construct              | Excavation                            | \$15/ft <sup>2</sup>                              | --                             | Requires design                |
| Weir Tank                                  | Trash, sediment, some oil      | 60 – 100                   | 1,800                             | 2 – 3 days;<br>1 week modified | Transport by truck                    | \$55-\$70/day                                     | \$1,700/disposal               | May require tank modifications |
| Dewatering Tank                            | Sediment                       | Varies                     | 1,200–1,500                       | 1–3 days                       | Transport by truck                    | \$70-\$90/day                                     | \$190-\$660 fabric replacement |                                |
| Gravity Bag Filter                         | Sediment                       | 300, 800                   | 100-400                           | 1 day                          | Backhoe or other for removal          | \$170-\$300/bag purchase, \$780 - \$3,000/barrier | Bag replacement                |                                |
| Sand Media Filter                          | Sediment, metals               | 80–1,000 (varies by model) | 17-450                            | 1–2 days                       | Forklift                              | \$1,700 - \$6,200/mo., \$780-\$2,300 setup        | \$75- \$170/mo.                |                                |
| Pressurized Bag Filter                     | Sediment, metals, hydrocarbons | 50–100 (varies by model)   | 200-320                           | 1–2 days                       | Forklift, or truck for trailer        | \$1,300-\$5,300/mo., \$230- \$780 setup           | \$450-\$1,900/mo.              |                                |
| Cartridge Filter                           | Sediment, metals, hydrocarbons | 50- 1,000                  | 200                               | 1–2 days                       | Forklift, or truck for trailer        | \$1,200-\$4,700/mo., \$2,300 setup                | \$1,700-\$7,800/mo.            | Requires pre-treatment         |
| Active Treatment System                    | Sediment, hydrocarbons         | Varies                     | Varies                            | Lengthy                        | Excavation, truck transport, forklift | Varies  | Varies                         | Requires design                |

<sup>1</sup>Caltrans has not validated these performance expectations. This information is based on generally-available manufacturer's information.

Legend: ft<sup>2</sup>: square feet; gpm: gallons per minute

## B.3 Sediment Treatment Methods and Technologies

### B.3.1 Desilting Basin

**Description:** A desilting basin is a temporary basin with a controlled release structure formed by excavation or construction of an embankment to detain sediment-laden runoff and allow sediment to settle out before discharging (see Figure B-1).

**Specifications:** Desilting basin design requirements are outlined in the Construction Site Best Management Practices Manual (SC-2) and should be used to design and construct the basin. The required desilting basin size is based on the size of the contributing drainage area. Desilting basins are intended for areas of less than 30 hectares.

For dewatering discharges, desilting basins are sized based on flow rate. If a desilting basin is to be used for treating dewatering discharges, it must be designated only for that specific use and cannot be used for storm water runoff treatment.

The following table provides general guidance in sizing a basin for a range of discharge flow rates. The calculations used to determine the required surface area are based on a given target particle size to be removed (with an associated settling velocity).

Table B-2 is based on the following design criteria: 0.015 mm target particle size, a continuous flow rate through the basin (flow in equals flow out), and full basin storage (including an 85 cubic yard sediment storage zone).

**Table B-2. Example Desilting Basin Sizing**

| Flow Rate, Q (gpm) | Required Surface Area, As (ft²) | Length/Width: 2:1 |        |
|--------------------|---------------------------------|-------------------|--------|
|                    |                                 | L (ft)            | W (ft) |
| 25                 | 131.9                           | 16.24             | 8.12   |
| 50                 | 263.7                           | 22.97             | 11.48  |
| 100                | 527.5                           | 32.48             | 16.24  |
| 150                | 792.0                           | 39.80             | 19.90  |
| 200                | 1,055                           | 45.93             | 22.97  |
| 250                | 1,318                           | 51.35             | 25.67  |
| 300                | 1,583                           | 56.27             | 28.13  |
| 350                | 1,846                           | 60.76             | 30.38  |
| 400                | 2,110                           | 64.96             | 32.48  |
| 450                | 2,374                           | 68.90             | 34.45  |
| 500                | 2,638                           | 72.64             | 36.32  |

Legend: ft: feet; ft²: square feet; gpm: gallons per minute

|                              |  |
|------------------------------|--|
| <b>Pollutant Removal:</b>    | Effective for removal of trash, large to some fine-sized particles (gravel to silt), and some metals that settle out with the sediment.  |
| <b>Advantages:</b>           | <ul style="list-style-type: none"><li>• Desilting basins achieve sediment removal to a level of 0.01 - 0.02 mm (20 microns)</li><li>• Holds large volumes of sediment</li></ul>  |
| <b>Set Up/ Installation:</b> | <ul style="list-style-type: none"><li>• Length to width ratio: 2:1</li><li>• Depth of basin between 3 feet and 5 feet</li></ul>  |
| <b>Limitations:</b>          | <ul style="list-style-type: none"><li>• Desilting basins require a large surface area in order to meet flow and detention times to achieve the desired sediment removal.</li><li>• Construction of a basin in-line with a live watercourse is not permitted.</li><li>• Ineffective in removing colloidal particles.</li><li>• Should not be used to treat groundwater during the rainy season.</li></ul> |
| <b>Maintenance:</b>          | <ul style="list-style-type: none"><li>• Maintenance is required for safety fencing, vegetation, embankment, inlet and outfall structures, as well as other features.</li><li>• Remove sediment when storage volume is reduced by 1/3.</li></ul>  |
| <b>Cost:</b>                 | Construction costs are approximately \$15/ft <sup>2</sup>  |



Figure B-2. Temporary Basin

### B.3.2 Sediment Trap

**Description:** A sediment trap is a temporary containment area that allows sediment in collected storm water to settle out during infiltration or before the runoff is discharged through a stabilized spillway. Sediment traps are formed by excavating or constructing an earthen embankment across a waterway or low drainage area.<sup>xc</sup>

**Specifications:** Design features include a settling zone and sediment storage zone as defined in the Construction Site Best Management Practices Manual (SC-3), which should be used to design and construct the trap. The sediment trap size is based on the size of the contributing drainage area. Sediment traps are intended for areas of less than two hectares.

For dewatering discharges, sediment traps are sized based on flow rate. If a sediment trap is to be used for treating dewatering discharges, it must be designated for that specific use only and cannot be used for storm water runoff treatment.

The following table provides general guidance in sizing a sediment trap for a range of discharge flow rates. The calculations used to determine the required surface area are based on a given target particle size to be removed (with an associated settling velocity). Table B-3 is based on the following design criteria: 0.01 mm target particle size, a continuous flow rate through the basin (flow in equals flow out), and full basin storage (including both zones).

| Table B-3. Example Sediment Trap Sizing |  |                   |        |
|---|--|-------------------|--------|
| Flow Rate, Q (gpm)                      | Required Surface Area, As (ft <sup>2</sup> ) | Length/Width: 2:1 |        |
|   |  | L (ft)            | W (ft) |
| 25                                      | 444.7  | 29.82             | 14.91  |
| 50                                      | 890.2  | 42.19             | 21.10  |
| 100                                     | 1,781  | 59.68             | 29.84  |
| 150                                     | 2,672  | 73.10             | 36.55  |
| 200                                     | 3,561  | 84.39             | 42.19  |
| 250                                     | 4,452  | 94.36             | 47.18  |
| 300                                     | 5,341  | 103.4             | 51.68  |
| 350                                     | 6,233  | 111.7             | 55.83  |

Legend: ft: feet; ft<sup>2</sup>: square feet; gpm: gallons per minute



|                             |  |
|-----------------------------|--|
| <b>Pollutant Removal:</b>   | Effective for the removal of large and medium sized particles (sand and gravel), and some metals that settle out with the sediment.  |
| <b>Advantages:</b>          | Can be designed to fit in confined areas (such as a low point on the site)   |
| <b>Set Up/Installation:</b> | <ul style="list-style-type: none"><li>• Length to width ratio: 3:1</li><li>• Depth of basin between 3 feet and 5 feet</li></ul>  |
| <b>Limitations:</b>         | <ul style="list-style-type: none"><li>• Sediment traps require a large surface area to permit settling of sediment. They are only effective for the removal of large and medium sized particles and are intended to supplement other BMPs, including upstream erosion control.</li><li>• Multiple traps or additional volume may be required to accommodate site conditions. Construction of a basin in-line with a live watercourse is not permitted.</li></ul> |
| <b>Maintenance:</b>         | <ul style="list-style-type: none"><li>• Maintenance is required for safety fencing, vegetation, embankment, inlet and outfall structures, as well as other features.</li><li>• Remove sediment when storage volume is reduced by one-third.</li></ul>  |
| <b>Cost:</b>                | Construction costs are approximately \$15/ft <sup>2</sup>  |

### B.3.3 Weir Tank

**Description:** Figure B-3 shows the weir tank schematic diagrams. A weir tank separates water and waste by using weirs rather than a filter cloth or media. To achieve high levels of flow, multiple tanks can be used in parallel. If additional treatment is desired, the tanks can be placed in series or as pre-treatment for other treatment devices. The configuration of the weirs (over and under weirs) maximizes the residence time in the tank and determines the waste to be removed from the water such as oil, grease, and sediments.

Modifications to weir tanks can be made by some vendors to enhance the removal of suspended sediment by installing tube settlers (see Figure B-4) in the final chamber of the tank. Tube settlers enable the water to be channeled through a matrix of tubes that rise from the bottom to the top of the tank. The tubes (or rectangular channels) are pre-formed from plastic or other resin material in 2 to 3 foot modules with an approximate 60° angle that allows the sediment to collect at the surface of the tube and gravitate to the bottom.

Weir tanks often have a roof-mounted manway. Additional options include a weir box (see Figure B-5). The steel can be coated with a corrosion-resistant material.

**Specifications:** Table B-4 shows the typical weir tank specifications.

| Table B-4. Typical Weir Tank Specifications |  |
|---|--|
| Parameter                                   | Specifications   |
| Capacity                                    | 18,000 to 21,000 gallons   |
| Flow rate                                   | 60 to 100 gpm  |
| Optimal Flow Rate                           | 65 gpm   |
| Footprint dimensions <sup>1</sup>           | 35 feet long by 12.5 feet wide by 8 to 15 feet high with a 10 foot perimeter |
| Footprint Area                              | 1,800 ft <sup>2</sup>  |

<sup>1</sup>Varies by manufacturer.

|                              |  |
|------------------------------|--|
| <b>Pollutant Removal:</b>    | <ul style="list-style-type: none"> <li>• Trash, some settleable solids, some visible oil and grease, and some metals (removed with sediment).</li> <li>• Typical particle size removed: Can be designed to remove down to 0.05 mm (50 micron) for fine sand.</li> <li>• Removal is highly dependent on flow rate (i.e., residence time) through the tank. At a reduced flow rate, a weir tank can achieve improved results similar to a desilting basin or sediment trap. The range of flow rates given are based on vendor recommendations and calculations to achieve equivalent removal characteristic of a basin or trap.</li> </ul> |
| <b>Product Availability:</b> | <ul style="list-style-type: none"> <li>• 2-3 days' notice</li> <li>• 1 week for special tank modifications</li> <li>• Delivery time: 1 day</li> </ul>  |
| <b>Advantages:</b>           | <ul style="list-style-type: none"> <li>• Simplicity</li> <li>• No filter cloth or media required</li> <li>• Portable units</li> <li>• Inexpensive</li> </ul>   |
| <b>Set Up/ Installation:</b> | <ul style="list-style-type: none"> <li>• Weirs are installed per customer's specifications</li> <li>• Level, compacted ground preferable</li> <li>• Transported by truck and unloaded on site</li> <li>• Time: 30 minutes</li> </ul>   |
| <b>Limitations:</b>          | <ul style="list-style-type: none"> <li>• Sediment removal depends on particle size and settling velocity and flow/velocity through tank.</li> <li>• Requires a level surface and sufficient space.</li> <li>• Best used in conjunction with additional methods for additional sediment/pollutant removal.</li> </ul>   |
| <b>Maintenance:</b>          | <ul style="list-style-type: none"> <li>• Periodic cleaning based on visual inspection or when flow is reduced.</li> <li>• Open valve, drain, and remove sediment, clean with high-pressure hose as necessary.</li> <li>• Oil and grease disposal must be by licensed waste disposal company.</li> </ul>  |
| <b>Cost:</b>                 | <ul style="list-style-type: none"> <li>• Rental costs: \$55-70 per day per 21,000 gallon tank</li> <li>• \$1,400-\$4,700 one-time fee for tank modifications (per tank)</li> <li>• Maintenance costs</li> <li>• Waste Removal <ul style="list-style-type: none"> <li>— Disposal fees for sediment and liquid wastes, variable depending on pollutants</li> <li>— Approximately \$1,700 per disposal</li> </ul> </li> <li>• Transportation Costs</li> </ul>   |

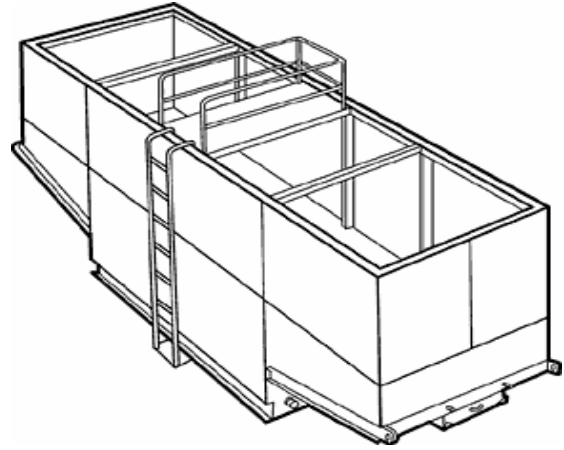


Figure B-3. Weir Tank Schematic Diagrams

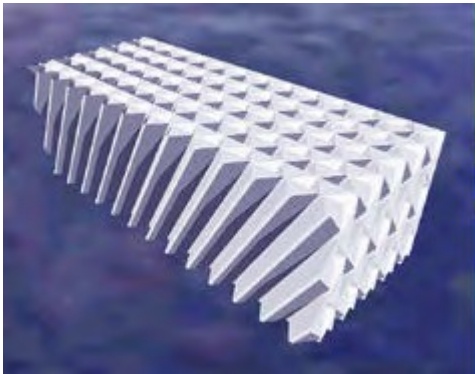


Figure B-4. Tube Settlers



Figure B-5. Additional Weir Configurations

### B.3.4 Dewatering Tank

**Description:** In a dewatering tank, (see Figure B-6) flow enters the tank through the top, passes through a fabric filter, and is discharged through the bottom of the tank. The filter separates the solids from the liquids.

**Specifications:** Table B-5 shows the typical dewatering tank specifications.

| Table B-5. Typical Dewatering Tank Specifications |  |
|---|--|
| Parameter   | Specifications   |
| Capacity  | 20 yd <sup>3</sup> , 25 yd <sup>3</sup> , and 30 yd <sup>3</sup>   |
| Flow rate   | Varies depending on the amount of water pumped into the tank, the fabric type used, fabric condition, and amount of sediment built up. |
| Footprint dimensions                              | 22 feet long by 8 feet wide by 6 feet high (on average) with a 10 foot perimeter   |
| Footprint Area                                    | 1,200 ft <sup>2</sup> to 1,500 ft <sup>2</sup>   |

- Pollutant Removal:**
- Depends on filter fabric, > 0.025 mm (25 microns)
  - Trash, sediments and some metals and oil removed with the sediment
- Product Availability:** 1-3 days' notice
- Advantages:**
- Portable, simple in design and function
  - Inexpensive
  - Various mesh filter cloths available
- Set Up/Installation:**
- Level ground preferable
  - Roll off truck and install fabric
  - Time: 30 minutes
- Limitations:**
- Requires equipment for on-site emptying (or hauling container offsite)
  - Amount and type of contaminant removal limited to filter material
- Maintenance:**
- Based on visual inspection or when flow is reduced
  - Typically every 40,000 to 60,000 gallons, the tank to drain, sediment is removed and the filter fabric is replaced
- Cost:**
- Rental Costs: \$70 - \$90 per day per tank
  - Operation & Maintenance:
    - Filter cloth liner: \$190 for 0.15 mm (150 micron)
    - Filter cloth liner: \$660 for 0.025 mm (25 micron)
  - Transportation Costs



Figure B-6. Dewatering Tank Schematic Diagram

### B.3.5 Gravity Bag Filter

**Description:** A gravity bag filter, (see Figure B-7) also referred to as a dewatering bag, is a square or rectangular bag made of non-woven geotextile fabric that collects sand, silt, and fines. Water to be treated is pumped into one side of the bag and seeps through the bottom and sides of the bag. A secondary barrier, such as a rock filter bed or straw bale barrier, is placed beneath and beyond the edges of the bag to capture sediments that escape the bag.

**Specifications:** Table B-6 shows the typical gravity bag filter properties.

| Table B-6. Typical Gravity Bag Filter Properties |  |   |
|--|--|---|
| Parameter  |  | Specifications                                |
| Capacity (approx.)                               | Bag Size: 4 ft x 6 ft                    | 300 to 400 gpm                                |
|  | Bag Size: 10 ft x 15 ft                  | 800 to 1,100 gpm                              |
|  | Effluent Collection Trailer <sup>1</sup> | 400 gpm                                       |
| Footprint dimensions (per bag)                   |  | Bag size plus an approximate 5 foot perimeter |
| Footprint Area (per bag)                         |  | 100 ft <sup>2</sup> to 400 ft <sup>2</sup>    |

<sup>1</sup>Has outlet for controlled draining.

- Pollutant Removal:**
- Sediments and some metals removed with sediment.
  - The bag can last for 3 days to 3 weeks, depending on quality of water and flow conditions.
- Product Availability:** Readily available
- Advantages:**
- Once soil filter is established, fairly efficient removal of sediments. Inexpensive. Easy to install and transport to site
  - Disposable, no cleaning required.
  - Fabrics vary and fabric type is engineered to meet required flow rate, strength, and permeability.
  - Can be located in a vendor-provided trailer or container. This allows collection of filtered water for further treatment.
- Set Up/Installation:**
- Level ground surface preferable
  - Secondary barrier of rock filter bed or straw bales
  - Initial installation: 1 day
  - Bag disposal and replacement: 2 hours
- Limitations:**
- Difficult to guarantee sediment removal efficiencies; variability of treatment depends on total suspended solids and particle size.
  - Bag has to build up solids to create soil filter. Time to do so varies depending on amount of sediments present in the water. Initial solids removal is minimal.
  - Continuous monitoring required to determine the need to replace bag. The flow



rate must also be adjusted as necessary to prevent the bag from exploding or tearing. The secondary barrier must be inspected frequently to prevent overfilling.

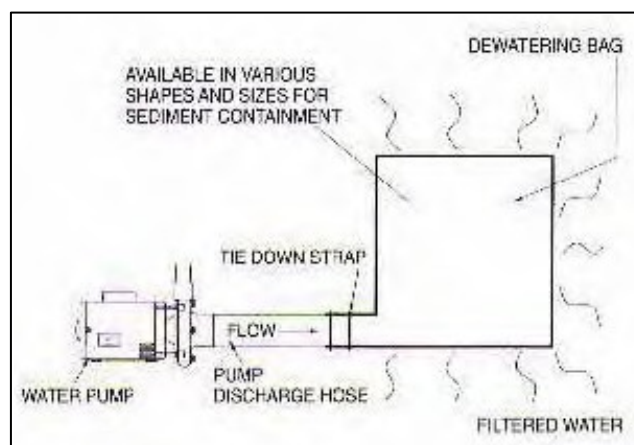
- Free discharge is difficult to contain for secondary treatment; a container or trailer must be used to contain the discharge
- May cause erosion, unless appropriate measures are established.
- Hose connection can fail.

**Maintenance:**

- Maintenance involves monitoring the flow, and observing bag condition and capacity, and secondary containment barrier, if one is present.
- The bag is replaced when it no longer filters sediment or passes water at a reasonable rate.
- Removed sediments must be handled properly. Retained sediment must be either dispersed onsite and stabilized, or disposed at a location approved by the Resident Engineer.

**Cost:**

- 4 foot by 6 foot bag: \$170 each
- 10 foot by 15 foot bag: \$300 each
- Cost of secondary barrier: \$780-\$3,000, varies by size and site



**Figure B-7. Gravity Bag Filter Schematic Diagram**



### B.3.6 Sand-Media Particulate Filter

**Description:** Generally, sand filters are used as a polishing step or final treatment. They are often used after a significant amount of sediment and other pollutants are removed with other treatment technologies. Sand filters can be used as standalone treatment or in conjunction with bag or cartridge filtration (see Figure B-8).

**Specifications:** Table B-7 shows the typical sand media particulate filter.

| Table B-7. Typical Sand-Media Particulate Filter |         |   |
|--|---------|---|
| Parameter  |         | Specifications                                      |
| Flow Rate <sup>1</sup>                           |         | 80 to 1,000 gpm                                     |
| Footprint Dimensions                             | Minimum | 4 feet long by 2 feet wide with a 5 foot perimeter  |
|  | Maximum | 5 feet long by 20 feet wide with a 5 foot perimeter |
| Footprint Area                                   | Minimum | 170 ft <sup>2</sup>                                 |
|  | Maximum | 450 ft <sup>2</sup>                                 |

<sup>1</sup>Depending on model selection.

- Pollutant Removal:**
- Trash, sediment, metals, biological oxygen demand (BOD), turbidity
  - Typical particle size removed: down to 0.01 mm (10 microns) with 95 percent removal efficiency. Recirculation through a second unit can reduce particle size to 0.005 mm (5 microns) or less.
- Product Availability:** 1-2 days' notice
- Advantages:**
- Portable, compact
  - Particle size removal and efficiency
  - Self-cleaning; back-washing makes this system cost-effective
  - Reduction of metals and other pollutants attached to soil particles
- Set Up/Installation:**
- Requires level, compacted surface
  - Forklift required for off-loading from truck
  - Time: 2 hours
- Limitations:**
- Backwash controller requires power
  - Backwash tanks with clean water are required
  - Does not effectively remove colloidal particles
- Maintenance:**
- Once set up, requires monthly service to check level of (and add) sand media.
- Cost:**
- Rental: \$1,700-\$6,200/month per unit, dependent on flow rate and project location
  - \$780-\$2,300 set up charge
  - Media: \$75-\$170/month
  - Transportation Costs



Figure B-8. Sand-Media Filter Schematic Diagrams

### B.3.7 Pressurized Bag Filter

**Description:** A pressurized bag filter is typically composed of single filter bags made from polyester felt material. Water flows through the bag filter and is often discharged through a distribution header which allows for parallel flow into an additional treatment unit. Pressurized bag filters are available in a variety of configurations. Some units include a combination of bag filters and cartridge filters for enhanced pollutant removal (see Figure B-9).

**Specifications:** Table B-8 shows the typical pressurized bag filter specifications.

| Table B-8. Typical Pressurized Bag Filter Specifications |  |
|--|--|
| Parameter  | Specifications                                     |
| <b>Bag Filter</b>  |  |
| Flow Rate  | 400 gpm  |
| Footprint Dimensions                                     | 5 feet long by 3 feet wide with a 5 foot perimeter |
| Footprint Area   | 200 ft <sup>2</sup>                                |
| <b>Bag/Cartridge Filter Combination<sup>1</sup></b>      |  |
| Flow Rate  | 50 to 400 gpm                                      |
| Footprint (50 gpm)                                       | 5 feet long by 3 feet wide                         |
| Footprint (400 gpm)                                      | 10 feet long by 6 feet wide                        |

<sup>1</sup>Varies by model.

**Pollutant Removal:**

- Trash, sediment, metals, biological oxygen demand (BOD), turbidity, hydrocarbons
- Typical particle size removed: down to 0.002 mm (2 micron) with up to 99 percent removal efficiency depending on filter selected
- Oil absorbent bags available for hydrocarbon removal

**Product Availability:** 1 - 2 days' notice

**Advantages:**

- High solids holding capacity.
- Bag filters have range of 0.002 mm to 0.1 mm (1 to 100 microns) rating. Bag/cartridge filter combination units can increase particle removal down to 0.0005 mm (0.5 microns).
- Skid mounted or trailer mounted.
- Individual bags placed in parallel can accommodate higher flow rates.
- Portable, compact.

**Set Up/Installation:**

- Level, compacted surface
- Forklift required for skid units
- Time: 1 - 2 hours

**Limitations:**

- Expensive
- Does not effectively remove colloidal particles

**Maintenance:** Filter bags must be replaced when the pressure differential exceeds manufacturer's recommendation

- Cost:**
- Bag Filter Unit: \$2,800/month rental + \$230 setup and fill charge
  - Bag/Cartridge Filter Combination Unit Rental Cost:
    - 50 gpm unit: \$1,300/month rental + \$230 set up charge
    - 400 gpm unit: \$5,300/month rental + \$780 set up charge
  - Maintenance Cost:
    - 50 gpm unit: \$450/month
    - 400 gpm unit: \$1,900/month
  - Transportation Costs



Figure B-9. Bag/Cartridge Filters and Spent Bag/Cartridge Filters

### B.3.8 Cartridge Filter

**Description:** Cartridge filters provide a high degree of pollutant removal by utilizing a number of individual cartridges as part of a larger filtering unit. They are often used as a secondary or higher (polishing) level of treatment after a significant amount of sediment and other pollutants are removed. Units come with various cartridge configurations (for use in series with pressurized bag filters) or with a larger single cartridge filtration unit (with multiple filters within) (see Figure B-10).

**Specifications:** Table B-9 shows the typical cartridge filter specifications.

| Table B-9. Typical Cartridge Filter Specifications |  |
|--|--|
| Parameter  | Specifications                                       |
| Flow Rate <sup>1</sup>                             | 40 to 1,000 gpm                                      |
| Footprint Dimensions                               | 4 feet long by 3.5 feet wide with a 5 foot perimeter |
| Footprint Area                                     | 200 ft <sup>2</sup>                                  |

<sup>1</sup>Single Cartridge Unit

**Pollutant Removal:**

- Trash, sediment, metals, biological oxygen demand (BOD), turbidity, hydrocarbons
- Hydrocarbons can effectively be removed with special resin cartridges.
- Typical particle size removed: to less than 0.002 mm (2 micron) with up to 99.9 percent removal efficiency depending on filter selected

**Product Availability:** 1-2 days' notice

**Advantages:**

- Filtration through various types of cartridge media (paper, polypropylene, nylon, and cellulose)
- Multi-cartridge filters provide a large surface area for a longer service life
- Removes particle size in the range of 0.0005 to 0.100 mm (0.5 to 100 micron)
- Skid mounted or trailer mounted

**Set Up/Installation:**

- Requires level, compacted surface
- Skid mounted or trailer mounted
- Forklift required for skid units
- Time: 2 hours

**Limitations:**

- Expensive
- Requires pre-treatment
- Will not remove colloidal particles

**Maintenance:** Change cartridges when pressure differential exceeds manufacturer's recommendation

**Cost:**

- Single Cartridge Unit (90 individual cartridges)
  - Rental: \$1,200-\$4,700/month
  - \$2,300 setup charge
- Maintenance: \$1,700-7,800/month, depending on sediment loading
- Transportation Costs



Figure B-10. Cartridge Filter Schematic

### B.3.9 Active Treatment Systems

|                              |  |
|------------------------------|--|
| <b>Description:</b>          | <p>Active Treatment Systems (ATS) apply conventional water treatment technologies, in use for over a century, to stormwater quality (see Figure B-11 and Table B-10).</p> <p>The Construction General Permit does not require the use of an ATS; however, for waters and sites where the reliability of the stormwater is of concern, these systems are recommended. In general, these systems are most useful for construction sites with: 1) severely impaired receiving waters, 2) sediment that is difficult to remove from suspension, and 3) sites with small disturbed areas. In each of these cases an ATS provides an extra degree of control over the quality of the stormwater leaving the construction site.</p> |
| <b>Specifications:</b>       | <ul style="list-style-type: none"> <li>• An ATS uses a coagulant or flocculent for the treatment of water with a sedimentation basin for turbidity reduction. In addition, pH adjustment or bag/cartridge/sand filters may be included (see Table B-11).</li> <li>• The exact configuration of the ATS will be dependent on the anticipated quality of the water to be treated and receiving water requirements.</li> <li>• The size of the treatment system will be dependent on the acreage of the active disturbed soil area. The system is required to be sized for a 10 year-24 hour storm.</li> <li>• Refer to the Caltrans Project Planning and Design Guide for more information about the use of an ATS.</li> </ul> |
| <b>Pollutant Removal:</b>    | <ul style="list-style-type: none"> <li>• Sediment and some other pollutants may be removed.</li> <li>• Hydrocarbons can effectively be removed using special resin cartridges.</li> </ul>  |
| <b>Product Availability:</b> | There is a longer time delay in acquiring an ATS due to the requirement for proper design.   |
| <b>Advantages:</b>           | <ul style="list-style-type: none"> <li>• Effective treatment for complicated sites.</li> <li>• Skid mounted or trailer mounted.</li> </ul>   |
| <b>Set Up/ Installation:</b> | <ul style="list-style-type: none"> <li>• Requires level, compacted surface</li> <li>• Time: on the order of days, depending on the complexity of the ATS.</li> <li>• Storms can routinely interrupt power supply systems, thus a backup power source must be available (uninterruptable power supply and backup generator).</li> </ul>   |
| <b>Limitations:</b>          | <ul style="list-style-type: none"> <li>• Expensive</li> <li>• Used only for accumulated stormwater</li> <li>• May require preliminary treatment</li> <li>• Residual treatment chemical residue (Chitosan) may have to be measured and treated</li> </ul>   |
| <b>Maintenance:</b>          | Cartridges are replaced when pressure differential exceeds manufacturer's recommendation   |
| <b>Cost:</b>                 | <ul style="list-style-type: none"> <li>• Rental: varies depending on the complexity of the system</li> <li>• Setup: varies</li> <li>• Maintenance: varies, depending on sediment loading and chemical requirement</li> <li>• Transportation Costs</li> </ul>   |

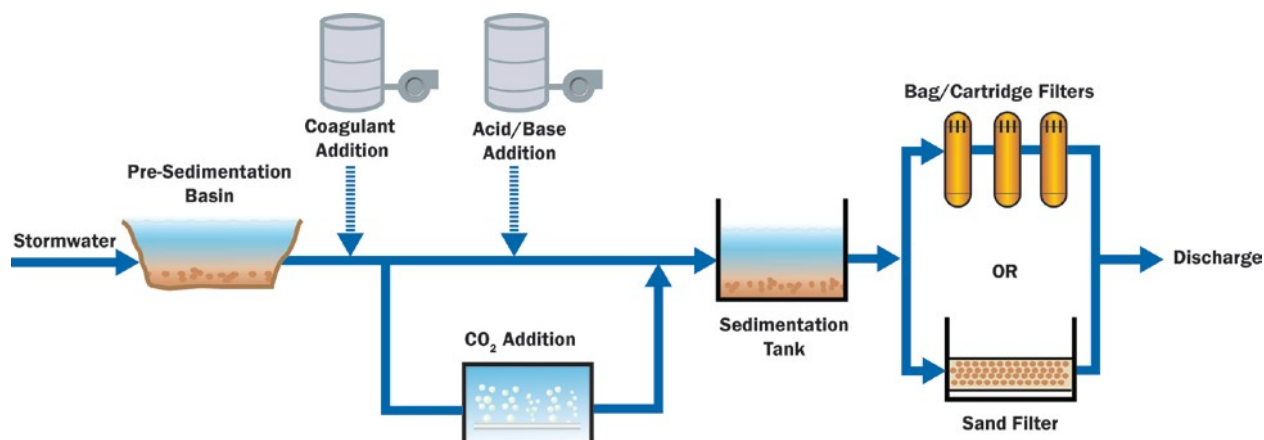


Figure B-11. Potential Treatment Schematic

Table B-10. Potential ATS Components

| Component                      | Use   |
|--------------------------------|---|
| Coagulant Dosing Equipment     | Chemical for forming floc and removing turbidity          |
| pH Adjustment Dosing Equipment | Chemical for adjusting pH within proper range             |
| Sedimentation Basin            | Gravity particulate removal and sludge removal/collection |
| Bag/ Cartridge/ Media Filters  | Filters for particle removal                              |

Table B-11. Potential ATS Chemicals

| Class of Chemical       | Chemical   | Advantages            | Disadvantages                                   | Approximate Cost <sup>1</sup>  |
|-------------------------|--|-----------------------|---|--------------------------------|
| pH decrease             | Hydrochloric acid (HCl)<br>Sulfuric acid (H <sub>2</sub> SO <sub>4</sub> ) | Low Dose              | Safety concerns                                 | Varies                         |
|                         | Carbon dioxide (CO <sub>2</sub> )  | Inert, self-buffering | Mechanically intensive, requires diffuser/basin | Varies                         |
| pH increase             | Sodium hydroxide (NaOH)  | Low dose              | Safety concerns                                 | Varies                         |
| Coagulant/<br>floculent | Alum   | Lower cost            | Reduces pH, can require high dose               | Varies                         |
|                         | Ferric (chloride/sulfate)  | Lower cost            | Reduces pH, can require high dose               | Varies                         |
|                         | Chitosan   | Low dose              | May not work well for some soils                | Approximately \$2,500 per tote |

<sup>1</sup>Costs of ATS chemicals vary and are dependent on the amount of chemical needed, the purity required, and the concentration and volume available from the supplier.



## **Appendix C: Water Quality and Discharge Parameters Assessment Form, Dewatering Operations Form, Construction General Permit Forms**

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## C. Assessment and Monitoring Forms

Table C-1 and Table C-2 may be used when evaluating dewatering permit options.

Once a dewatering operation has been selected, the discharge must be monitored. For that reason, the Dewatering Operations Monitoring Form is included.

Additionally, Caltrans has developed forms to comply with the requirements of the Construction General Permit. Those forms that relate to dewatering are provided after the Dewatering Operations Monitoring Form. These forms are:

- CEM-20EE. Attachment EE. Stormwater Sampling Locations
- CEM-2030. Stormwater Site Inspection Report
- CEM-2031. Daily Stormwater Site Inspection Report
- CEM-2052. Stormwater Sample Field Test Report
- CEM-2061. Notice of Discharge Report

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### Water Quality and Discharge Parameters Assessment Form

Contract Number: \_\_\_\_\_

Resident Engineer: \_\_\_\_\_

Dewatering Location: \_\_\_\_\_

Origin of Water (circle): Groundwater   Cofferdam/Diversion   Accumulated Precipitation   Other

Assessment Date: \_\_\_\_\_

**Table C-1 Water Quality Assessment**

The following questions provide an initial assessment of the quality of the water to be discharged from the dewatering operation.

|  |                              |   |     |    |
|--|------------------------------|---|-----|----|
| 1. The common sense test determines if the water has pollutants that cannot be seen by the naked eye (i.e., non-visible pollutants): |                              |   |     |    |
| Common Sense Test  | a.                           | Is there any reason to suspect that the water may be polluted by something other than sediment? | YES | NO |
|  | b.                           | Is the water located in an area of known contamination?   | YES | NO |
|  | c.                           | Has the water come in contact with construction activities or construction materials?           | YES | NO |
| 2. The sight test determines if the water has visible pollutants.  |                              |   |     |    |
| Sight Test   | a.                           | Does the water have an abnormal visual feature?   | YES | NO |
|  | b.                           | If yes, circle the appropriate visual feature:  |     |    |
|  |                              | Oily Sheen      Floating Foam      Murky Appearance      Unusual Color      Other               |     |    |
| Smell Test   | Does the water have an odor? |   | YES | NO |

If you answered YES to any of the above questions, explain:

If you answered YES to any of the questions in the assessment, the water contains (or probably contains) non-visible pollutants. If you answered YES to any of these questions or suspect that the water contains pollutants other than sediment, contact the CSWC for assistance with additional testing and management options.

Prepared by: \_\_\_\_\_ RE Approval: \_\_\_\_\_

Table C-2 Discharge Parameter Calculation Sheet

To estimate water discharge parameters, answer the following questions and document the results below.

|                           |  |                     |
|---------------------------|--|---------------------|
|                           | 1. The discharge is from (circle one):   |                     |
|                           | Groundwater  | Cofferdam/Diversion |
| Origin of Water           | Accumulated Precipitation  | Other (specify)     |
|                           | 2. Will the discharge be intermittent or continuous (circle one)?  |                     |
|                           | Intermittent   | Continuous          |
| Proposed Daily Flow Rate  | 3. Estimate the total quantity of water and proposed discharge rate for each daily discharge event (Qd, gallons per day). This can be estimated from the pump discharge rate and the expected daily total of hours the pump will be run.<br>Qd (gpd) = _____ gals/min pump rate x 60 minutes/hour. x _____ hours discharge      Qd = _____ gpd   |                     |
| Additional Considerations | 4. How does the proposed daily flow rate compare to that of the receiving water?<br>a. Receiving water flow rates can be acquired from the National Weather Service's California Nevada River Forecast Center ( <a href="http://www.cnrfc.noaa.gov/">http://www.cnrfc.noaa.gov/</a> ).<br>5. How does the discharge pH and turbidity compare to the receiving water pH and turbidity?<br>6. If an exceedance occurs, the operation must be stopped and a reevaluation must occur.<br>7. During dewatering, apply controls to minimize the amount of water flowing into the excavation.<br>8. Ensure that the discharge occurs during appropriate work windows as specified in the relevant permit or permits.<br><br>Other potential sources for "origin of water" include: concrete column cooling water discharge or water collected in low-lying areas at the site (evaluate all construction activities and materials that may contact waters flowing from upstream locations) |                     |
| Duration                  | 9. What is the expected duration of the dewatering operation? _____ (days)   |                     |
| Total Discharge           | 10. What is the estimated total discharge for the project duration (VT)?<br>a. To estimate the total discharge, multiply the daily flow rate (Qd) by the estimated duration.      VT = _____ gallons   |                     |
| Comments:                 |  |                     |

Prepared by: \_\_\_\_\_ RE Approval: \_\_\_\_\_

## Dewatering Operations Monitoring Form

Contract Number: \_\_\_\_\_

Discharge Start Date and Time: \_\_\_\_\_

Resident Engineer: \_\_\_\_\_

Stop Date and Time: \_\_\_\_\_

Location: \_\_\_\_\_

BMP(s) in Use: \_\_\_\_\_

Regional Board Order/Res. No.: \_\_\_\_\_

| Date | Time | Observer Initials | Pump Size or Estimated Flow Rate (gpm) | Effluent Visual Observation <sup>1</sup> | Comments <sup>2</sup> |
|------|------|-------------------|--|--|-----------------------|
|      |      |                   |  |  |                       |
|      |      |                   |  |  |                       |
|      |      |                   |  |  |                       |
|      |      |                   |  |  |                       |
|      |      |                   |  |  |                       |
|      |      |                   |  |  |                       |
|      |      |                   |  |  |                       |
|      |      |                   |  |  |                       |
|      |      |                   |  |  |                       |
|      |      |                   |  |  |                       |

<sup>1</sup> Visual clarity or other monitoring parameters (odor, oily sheen, floating foam, murky appearance, unusual color, etc.)<sup>2</sup> Any maintenance or changes to system (increased/decreased output, system offline for 3 days, etc.)

Legend: gpm: gallons per minute

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SWPPP ATTACHMENT EE  
STORMWATER SAMPLING LOCATIONS

CEM-20EE (NEW 9/2012)

|   |                           |  |
|---|---------------------------|--|
| PROJECT INFORMATION NAME AND SITE ADDRESS | CONTRACT NUMBER/CO/RTE/PM | PROJECT SITE RISK LEVEL<br><br><input type="checkbox"/> Risk Level 1<br><br><input type="checkbox"/> Risk Level 2<br><br><input type="checkbox"/> Risk Level 3 |
|   | PROJECT IDENTIFIER NUMBER |  |

STORMWATER SAMPLING LOCATIONS

Project Site Non-Visible Pollutant Sampling Locations

SWPPP Table 700.2.2.3.2.1 & Table 700.2.2.3.2.2

| Location No. | Uncontaminated Location No. | Location | Pollutant Source | Pollutant | Water Quality Indicator Constituent |
|--------------|-----------------------------|----------|------------------|-----------|-------------------------------------|
|              |                             |          |                  |           |                                     |
|              |                             |          |                  |           |                                     |
|              |                             |          |                  |           |                                     |
|              |                             |          |                  |           |                                     |
|              |                             |          |                  |           |                                     |
|              |                             |          |                  |           |                                     |
|              |                             |          |                  |           |                                     |
|              |                             |          |                  |           |                                     |

Instruction: Include the following Table for all Risk Levels.

Project Site Drainage Areas

SWPPP Table Table 700.1.1.1

| Drainage Area No. | Location | Drainage Area (acres) | Disturbed Soil Area (acres) | Percentage of Drainage Area that is Disturbed Soil Area (%) |
|-------------------|----------|-----------------------|-----------------------------|---|
|                   |          |                       |                             |   |
|                   |          |                       |                             |   |
|                   |          |                       |                             |   |
|                   |          |                       |                             |   |
|                   |          |                       |                             |   |
|                   |          |                       |                             |   |
|                   |          |                       |                             |   |
|                   |          |                       |                             |   |

# SWPPP ATTACHMENT EE

## STORMWATER SAMPLING LOCATIONS

CEM-20EE (NEW 9/2012)

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|              |                           |                           |
|--------------|---------------------------|---------------------------|
| PROJECT NAME | CONTRACT NUMBER/CO/RTE/PM | PROJECT IDENTIFIER NUMBER |
|--------------|---------------------------|---------------------------|

### STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for all Risk Levels when dewatering will be performed on the project site. Delete the Table if there is no dewatering planned for the project site.

#### Project Site Dewatering Sampling Locations

(SWPPP Table 700.2.3.3.2.1)

| Location No. | Location | Dewatering Permit?  | Pollutant From Construction Activity | Water Quality Indicator Constituent |
|--------------|----------|---|--------------------------------------|-------------------------------------|
|              |          | <input type="checkbox"/> YES<br><input type="checkbox"/> NO |                                      |                                     |
|              |          | <input type="checkbox"/> YES<br><input type="checkbox"/> NO |                                      |                                     |
|              |          | <input type="checkbox"/> YES<br><input type="checkbox"/> NO |                                      |                                     |

Instruction: Include the following Table for all Risk Levels when there is a potential for impounded stormwater that will have to be discharged from the project site.

#### Project Site Potential Impounded Stormwater Sampling Locations

(SWPPP Table 700.2.3.3.2.2)

| Location No. | Location | Dewatering Permit?  | Pollutant From Construction Activity | Water Quality Indicator Constituent |
|--------------|----------|---|--------------------------------------|-------------------------------------|
|              |          | <input type="checkbox"/> YES<br><input type="checkbox"/> NO |                                      |                                     |
|              |          | <input type="checkbox"/> YES<br><input type="checkbox"/> NO |                                      |                                     |
|              |          | <input type="checkbox"/> YES<br><input type="checkbox"/> NO |                                      |                                     |

Instruction: Include the following Table for all Risk Levels when there are dewatering activities or a potential for impounded stormwater that will have to be discharged from the project site and there is a high risk receiving water.

#### Project Site Potential Dewatering/Impounded Stormwater Sampling Locations and Receiving Water Sampling Locations

(SWPPP Table 700.2.3.3.2.3)

| Dewatering/Impounded Stormwater Location No. | Location | Receiving Water Location No. | Location |
|--|----------|------------------------------|----------|
|  |          |                              |          |
|  |          |                              |          |
|  |          |                              |          |

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# SWPPP ATTACHMENT EE

## STORMWATER SAMPLING LOCATIONS

CEM-20EE (NEW 9/2012)

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|--------------|---------------------------|---------------------------|
| PROJECT NAME | CONTRACT NUMBER/CO/RTE/PM | PROJECT IDENTIFIER NUMBER |
|--------------|---------------------------|---------------------------|

### STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for Risk Level 2 and Risk Level 3 projects. Delete the Table for Risk Level 1 projects.

#### Project Site Discharge Sampling Locations for Turbidity and pH

SWPPP Table 700.2.4.3.2.1

| Location No. | Location | Drainage Area (acres) | Disturbed Soil Area (acres) | Percentage of Drainage Area that is Disturbed Soil Area (%) | Are there construction activities that may affect pH of stormwater discharges? |
|--------------|----------|-----------------------|-----------------------------|---|--|
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |

Instruction: Include the following Table for Risk Level 2 and Risk Level 3 when project site has discharge locations that discharge directly to a receiving water. Delete the Table for Risk Level 1 projects.

#### Receiving Water Sampling Locations for Turbidity and pH When Project Site Discharges Directly To The Receiving Water

SWPPP Table 700.2.4.3.2.2

| Location No. | Location | Drainage Area (acres) | Disturbed Soil Area (acres) | Percentage of Drainage Area that is Disturbed Soil Area (%) | Are there construction activities that may affect pH of stormwater discharges? |
|--------------|----------|-----------------------|-----------------------------|---|--|
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                       |                             |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |

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# SWPPP ATTACHMENT EE

## STORMWATER SAMPLING LOCATIONS

CEM-20EE (NEW 9/2012)

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|              |                           |                           |
|--------------|---------------------------|---------------------------|
| PROJECT NAME | CONTRACT NUMBER/CO/RTE/PM | PROJECT IDENTIFIER NUMBER |
|--------------|---------------------------|---------------------------|

### STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for all Risk Levels. Delete the Table for Risk Level 1 projects if there are no project site run-on locations.

#### Project Site Run-on Sampling Locations

SWPPP Table 700.2.4.3.2.4

| Location No. | Location | Run-on May Affect Water Quality Discharged at Project Site Discharge Location No. | Is there any off-site disturbed soil area that could affect run-on water quality at this location? | Are there any off-site pollutants identified that could affect run-on water quality at this location? | Identified Potential Off-site Pollutants |
|--------------|----------|---|--|---|--|
|              |          |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO  | <input type="checkbox"/> YES<br><input type="checkbox"/> NO   |  |
|              |          |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO  | <input type="checkbox"/> YES<br><input type="checkbox"/> NO   |  |
|              |          |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO  | <input type="checkbox"/> YES<br><input type="checkbox"/> NO   |  |
|              |          |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO  | <input type="checkbox"/> YES<br><input type="checkbox"/> NO   |  |
|              |          |   | <input type="checkbox"/> YES<br><input type="checkbox"/> NO  | <input type="checkbox"/> YES<br><input type="checkbox"/> NO   |  |

Instruction: Include the following Table for all Risk Level 3 projects. Delete the Table for Risk Level 1 and Risk Level 2 projects.

#### Receiving Water Sampling Locations

SWPPP Table 700.2.4.3.2.5

| Location No. | Location | Project Site Discharge Location No. | Do discharges from this project site discharge location reach receiving water? |
|--------------|----------|-------------------------------------|--|
|              |          |                                     | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                                     | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                                     | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                                     | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |
|              |          |                                     | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                    |

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SWPPP ATTACHMENT EE  
STORMWATER SAMPLING LOCATIONS

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|--------------|---------------------------|---------------------------|
| PROJECT NAME | CONTRACT NUMBER/CO/RTE/PM | PROJECT IDENTIFIER NUMBER |
|--------------|---------------------------|---------------------------|

STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table when the RWQCB has requested specific water quality standard monitoring of project site discharge locations.

Stomwater Discharge Locations Required To Be Monitored By RWQCB

SWPPP Table 700.5.3.2.1

| Location No. | Location | Water Quality Standard(s) | Is there potential site run-on that may affect water quality standard(s)? |
|--------------|----------|---------------------------|---|
|              |          |                           | <input type="checkbox"/> YES<br><input type="checkbox"/> NO               |
|              |          |                           | <input type="checkbox"/> YES<br><input type="checkbox"/> NO               |
|              |          |                           | <input type="checkbox"/> YES<br><input type="checkbox"/> NO               |
|              |          |                           | <input type="checkbox"/> YES<br><input type="checkbox"/> NO               |

Instruction: Include the following Table when the RWQCB has requested specific water quality standard monitoring of receiving waters.

Receiving Water Sampling Locations Required To Be Monitored By RWQCB

SWPPP Table 700.2.4.3.2.5

| Location No. | Location | Water Quality Standard(s) |
|--------------|----------|---------------------------|
|              |          |                           |
|              |          |                           |
|              |          |                           |
|              |          |                           |

Instruction: Include the following Table when the project receives run-on with the potential to combine with stormwater discharges locations or receiving waters that require RWQCB specified water quality monitoring.

Run-on Locations With Potential To Combine With Stormwater Discharges Required To Be Monitored By RWQCB

SWPPP Table 700.2.5.3.2.4

| Location No. | Location | Water Quality Standard(s) |
|--------------|----------|---------------------------|
|              |          |                           |
|              |          |                           |
|              |          |                           |

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|--------------|---------------------------|---------------------------|
| PROJECT NAME | CONTRACT NUMBER/CO/RTE/PM | PROJECT IDENTIFIER NUMBER |
|--------------|---------------------------|---------------------------|

STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for Risk Level 3 when an active treatment system will be used on the project site. Delete the Table if active treatment system is not planned to be used on the project site.

Active Treatment System (ATS) Sampling Locations  
SWPPP Table 700.2.6.3.2

| Location No. | Location | Chemical/Additive Used in Active Treatment System | Residual Chemical/Additive Indicator Constituent |
|--------------|----------|---|--|
|              |          |   |  |
|              |          |   |  |
|              |          |   |  |
|              |          |   |  |

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**STORMWATER SITE INSPECTION REPORT**

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|   |  |
|---|--|
| PROJECT INFORMATION NAME AND SITE ADDRESS             | CONTRACT NUMBER/CO/RTE/PM<br><br>PROJECT IDENTIFIER NUMBER<br><br>WDID NUMBER  |
| CONTRACTOR NAME AND ADDRESS                           | PROJECT SITE RISK LEVEL<br><input type="checkbox"/> Risk Level 1 <input type="checkbox"/> N/A. WPCP<br><input type="checkbox"/> Risk Level 2 <input type="checkbox"/> N/A. Project resides in The Lake Tahoe Hydrologic Unit and is regulated under Order No. R6T-2011-019, NPDES No. CAG616002<br><input type="checkbox"/> Risk Level 3 |
| Submitted by contractor (print and sign name)         | Date   |
| Water Pollution Control Manager name and company name | Phone number<br><br>Emergency (24/7) phone number  |

**General Information**

|  |  |  |
|--|--|--|
| Inspector's Name   | Accompanied by Caltrans staff?<br><input type="checkbox"/> YES <input type="checkbox"/> NO    If Yes, Name/Initials: _____   | Date of Inspection   |
| Weather Condition<br><br><input type="checkbox"/> Clear<br><input type="checkbox"/> Partly cloudy<br><input type="checkbox"/> Cloudy   | Precipitation Condition<br><br><input type="checkbox"/> None <input type="checkbox"/> Heavy rain<br><input type="checkbox"/> Misty <input type="checkbox"/> Hail<br><input type="checkbox"/> Light rain <input type="checkbox"/> Snow<br><input type="checkbox"/> Rain | Wind Condition<br><br><input type="checkbox"/> None<br><input type="checkbox"/> Less than 5 mph<br><input type="checkbox"/> Greater than 5 mph |
| Construction Phase<br><br><input type="checkbox"/> Highway construction<br><input type="checkbox"/> Plant establishment<br><input type="checkbox"/> Suspension of work (inactive site) | Site Information<br>Total project area: _____ acres<br>Total project disturbed soil area: _____ acres<br>Current phase disturbed soil area: _____ acres<br>Current phase inactive disturbed soil: _____ acres  |  |

| Inspection Type<br><i>Check appropriate box(es)</i>                                  | Storm Information                                      |   |
|--|--|---|
| <input type="checkbox"/> Weekly<br><input type="checkbox"/> Quarterly non-stormwater | Time elapsed since last storm<br>_____ days            | Precipitation amount from last storm<br>_____ inches                          |
| <input type="checkbox"/> Pre-storm   | Time storm is expected<br>_____ (time)<br>_____ (date) | Expected precipitation amount<br>_____ inches                                 |
| <input type="checkbox"/> During storm event  | Time elapsed since storm began<br>_____ hours-minutes  | Precipitation amount from storm recorded from site rain gauge<br>_____ inches |
| <input type="checkbox"/> Post storm  | Time elapsed since storm<br>_____ hours-minutes        | Precipitation amount from storm recorded from site rain gauge<br>_____ inches |

| Date | Daily Site Inspection of Best Management Practices (BMP)<br>List Daily inspections for previous calendar week. Do not include weekly inspection. | Daily inspection performed by | Any corrective actions identified as completed or new? |                          | If yes, were the actions added or verified on CEM-2035, as appropriate? |                          | Date shown on corrective action form |
|------|--|-------------------------------|--|--------------------------|---|--------------------------|--------------------------------------|
|      |  |                               | YES  | NO                       | YES   | NO                       |                                      |
|      |  |                               | <input type="checkbox"/>                               | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |                                      |
|      |  |                               | <input type="checkbox"/>                               | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |                                      |
|      |  |                               | <input type="checkbox"/>                               | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |                                      |
|      |  |                               | <input type="checkbox"/>                               | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |                                      |
|      |  |                               | <input type="checkbox"/>                               | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |                                      |

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|---|---------------------------|
| PROJECT INFORMATION NAME AND SITE ADDRESS | CONTRACT NUMBER/CO/RTE/PM |
|   | PROJECT IDENTIFIER NUMBER |
|   | WDID NUMBER               |

**Site Inspection of Best Management Practices**

*If this form will be completed by hand in the field, click on "Show Entire Form" button at the top of page one to expand the sections, then print the form to take to the field.  
 If the inspection form does not contain enough lines for all locations, use the "Add Item" button so that all BMP locations are inspected and reported.*

| <b>Preservation of Existing Vegetation</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |    |  |                     |    |  |                                  |    |  |         |  |  |
|---|----|--|---------------------|----|--|----------------------------------|----|--|---------|--|--|
| Right location?   |    |  | Properly installed? |    |  | Maintenance or repair necessary? |    |  | Photos? |  |  |
| Yes   | No |  | Yes                 | No |  | Yes                              | No |  | Yes     |  |  |
| Location 1  |    |  |                     |    |  |                                  |    |  |         |  |  |
| Location 2  |    |  |                     |    |  |                                  |    |  |         |  |  |
| Location 3  |    |  |                     |    |  |                                  |    |  |         |  |  |

| <b>Disturbed Soil Area (DSA) Management</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><br>List all potential DSAs by location |    |  |                           |  |  |   |    |  |                                    |    |  |   |    |  |  |  |
|---|----|--|---------------------------|--|--|---|----|--|------------------------------------|----|--|---|----|--|--|--|
| Has area been disturbed?  |    |  | Date DSA first disturbed? |  |  | Is the DSA inactive and listed as a location on both temporary soil stabilization and temporary linear sediment barriers? |    |  | Is there a storm event forecasted? |    |  | Are there construction activities currently in progress within the DSA? |    |  | If no to previous question, what is the last day construction activities were in progress? | How many days has the DSA been active? |
| Yes   | No |  | Date                      |  |  | Yes   | No |  | Yes                                | No |  | Yes   | No |  | Date   | Days                                   |
| Location 1  |    |  |                           |  |  |   |    |  |                                    |    |  |   |    |  |  |  |
| Location 2  |    |  |                           |  |  |   |    |  |                                    |    |  |   |    |  |  |  |

**Notes:**

1. If it has been 14 days since a DSA has had active construction activities, the DSA is inactive and must be reported as a location on temporary soil stabilization and temporary linear sediment barriers.
2. DSAs must have erosion control and have temporary linear sediment barriers installed prior to a storm event.

| Location Number | Comments / Corrective Actions |  |  |  |  |  |  |  |  |  | Action No. |
|-----------------|-------------------------------|--|--|--|--|--|--|--|--|--|------------|
| 1               |                               |  |  |  |  |  |  |  |  |  |            |
| 2               |                               |  |  |  |  |  |  |  |  |  |            |

| <b>Temporary Soil Stabilization</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |    |  |                                  |    |  |   |    |  |         |  |  |            |
|--|----|--|----------------------------------|----|--|---|----|--|---------|--|--|------------|
| Inactive areas covered?  |    |  | 100% coverage of required areas? |    |  | Stabilized areas free from visible erosion? |    |  | Photos? |  |  | Action No. |
| Yes  | No |  | Yes                              | No |  | Yes   | No |  | Yes     |  |  |            |
| Location 1   |    |  |                                  |    |  |   |    |  |         |  |  |            |
| Location 2   |    |  |                                  |    |  |   |    |  |         |  |  |            |
| Location 3   |    |  |                                  |    |  |   |    |  |         |  |  |            |



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**Site Inspection of Best Management Practices, continued**  
*For project specific BMPs, insert the BMP name and additional inspection requirements below.*

|  |                        |  |   |  |   |   |         |   |   |  |    |
|--|------------------------|--|---|--|---|---|---------|---|---|--|----|
| <b>Temporary Linear Sediment Barriers</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Right location?        |  | Properly installed or cross barriers installed? |  | Maintenance performed when 1/3 height or repair needed? |   | Photos? | Comments and Required Actions   | Action No.                              |  |    |
|  | Yes                    | No   | Yes   | No   | Yes   | No  | Yes     |   |   |  |    |
| Location 1   |                        |  |   |  |   |   |         |   |   |  |    |
| Location 2   |                        |  |   |  |   |   |         |   |   |  |    |
| Location 3   |                        |  |   |  |   |   |         |   |   |  |    |
| <b>Storm Drain Inlet Protection</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No       | All inlets protected?  |  | Properly installed?                             |  | Maintenance or repair needed?                           |   | Photos? | Comments and Required Actions   | Action No.                              |  |    |
|  | Yes                    | No   | Yes   | No   | Yes   | No  | Yes     |   |   |  |    |
| Location 1   |                        |  |   |  |   |   |         |   |   |  |    |
| Location 2   |                        |  |   |  |   |   |         |   |   |  |    |
| Location 3   |                        |  |   |  |   |   |         |   |   |  |    |
| <b>Stockpile Management</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No               | Date stockpile created | Is the stockpile listed as a location on stockpile management inactive stockpiles?<br>If yes, stop here. |   | Is there a storm event forecasted?<br>If yes, stop here and take action. |   | Is stockpile being actively used?<br>If yes, stop here. |         | If no to previous question, what is the last day stockpile was actively used? | How long since stockpile actively used? | Has it been 3 days since the stockpile has been actively used?<br>If yes, take action. |    |
|  |                        | Yes  | No  | Yes  | No  | Yes   | No      | Date  | Days                                    | Yes  | No |
| Location 1   |                        |  |   |  |   |   |         |   |   |  |    |
| Location 2   |                        |  |   |  |   |   |         |   |   |  |    |

**Notes:**

1. If it has been 3 days (72 hours) since a stockpile has been active then the stockpile is inactive and must be reported as a location on stockpile management inactive stockpiles.
2. Stockpiles must be covered and have perimeter control installed prior to a storm event.

| Location Number | Comments / Corrective Actions | Photos? | Action No. |
|-----------------|-------------------------------|---------|------------|
|                 |                               | Yes     |            |
| 1               |                               |         |            |
| 2               |                               |         |            |

|   |                           |  |  |  |  |  |  |  |  |  |
|---|---------------------------|--|--|--|--|--|--|--|--|--|
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|   | WDID NUMBER               |  |  |  |  |  |  |  |  |  |

|   |                               |                                    |    |                           |    |  |    |  |            |
|---|-------------------------------|------------------------------------|----|---------------------------|----|--|----|--|------------|
| <b>Inactive Stockpile Management</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Type of Material or Waste     | Is the stockpile properly located? |    | Is the stockpile covered? |    | Does the stockpile have a perimeter control? |    | Does the stockpile need maintenance or repair? |            |
|   |                               | Yes                                | No | Yes                       | No | Yes  | No | Yes  | No         |
| Location 1  |                               |                                    |    |                           |    |  |    |  |            |
| Location 2  |                               |                                    |    |                           |    |  |    |  |            |
| Location Number   | Comments / Corrective Actions |                                    |    |                           |    |  |    | Photos?<br>Yes                                 | Action No. |
| 1   |                               |                                    |    |                           |    |  |    |  |            |
| 2   |                               |                                    |    |                           |    |  |    |  |            |

|   |  |    |                              |    |   |    |         |                               |            |
|---|--|----|------------------------------|----|---|----|---------|-------------------------------|------------|
| <b>Sediment and Desilting Basins</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Are basin inlets, outlets, and spillways in working order? |    | Is water contained in basin? |    | Is maintenance needed to provide required retention or detention? |    | Photos? | Comments and Required Actions | Action No. |
|   | Yes  | No | Yes                          | No | Yes   | No | Yes     |                               |            |
| Location 1  |  |    |                              |    |   |    |         |                               |            |
| Location 2  |  |    |                              |    |   |    |         |                               |            |
| Location 3  |  |    |                              |    |   |    |         |                               |            |

|   |  |    |  |    |  |    |                         |    |         |                               |            |
|---|--|----|--|----|--|----|-------------------------|----|---------|-------------------------------|------------|
| <b>Tracking Controls</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Do all entrances and exits have tracking controls? |    | Is pavement free from visible sediment tracking? |    | Does sediment need to be removed from rock or ribbed plates? |    | Is daily sweeping done? |    | Photos? | Comments and Required Actions | Action No. |
|   | Yes  | No | Yes  | No | Yes  | No | Yes                     | No | Yes     |                               |            |
| Location 1  |  |    |  |    |  |    |                         |    |         |                               |            |
| Location 2  |  |    |  |    |  |    |                         |    |         |                               |            |
| Location 3  |  |    |  |    |  |    |                         |    |         |                               |            |

|  |                       |    |               |    |         |                               |            |
|--|-----------------------|----|---------------|----|---------|-------------------------------|------------|
| <b>Wind Erosion Control</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Water trucks on-site? |    | Visible dust? |    | Photos? | Comments and Required Actions | Action No. |
|  | Yes                   | No | Yes           | No | Yes     |                               |            |
| Location 1   |                       |    |               |    |         |                               |            |
| Location 2   |                       |    |               |    |         |                               |            |
| Location 3   |                       |    |               |    |         |                               |            |

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|   |                              |    |  |    |  |    |         |                               |            |
|---|------------------------------|----|--|----|--|----|---------|-------------------------------|------------|
| <b>Dewatering Operations</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Dewatering currently active? |    | Dewatering conforms with RWQCB permit? |    | Dewatering discharge within discharge specified limitations? |    | Photos? | Comments and Required Actions | Action No. |
|   | Yes                          | No | Yes                                    | No | Yes  | No | Yes     |                               |            |
| Location 1  |                              |    |  |    |  |    |         |                               |            |
| Location 2  |                              |    |  |    |  |    |         |                               |            |
| Location 3  |                              |    |  |    |  |    |         |                               |            |

|   |                                   |    |   |    |                                 |    |         |                               |            |
|---|-----------------------------------|----|---|----|---------------------------------|----|---------|-------------------------------|------------|
| <b>Temporary Stream Crossing</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Constructed as shown on the plan? |    | Conforms to 404 permit and 1601 agreement requirements? |    | Maintenance or repair required? |    | Photos? | Comments and Required Actions | Action No. |
|   | Yes                               | No | Yes   | No | Yes                             | No | Yes     |                               |            |
| Location 1  |                                   |    |   |    |                                 |    |         |                               |            |
| Location 2  |                                   |    |   |    |                                 |    |         |                               |            |
| Location 3  |                                   |    |   |    |                                 |    |         |                               |            |

|  |   |    |   |    |   |    |   |    |                                   |    |  |    |         |
|--|---|----|---|----|---|----|---|----|-----------------------------------|----|--|----|---------|
| <b>Material Storage</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Located away from drainage courses and water courses? |    | Areas protected from run on and runoff? |    | Bagged and boxed materials stored on pallets? |    | Areas reasonably clean and free of spills, leaks, and other material? |    | Is material inventory up to date? |    | Liquid materials in secondary containment? |    | Photos? |
|  | Yes   | No | Yes                                     | No | Yes   | No | Yes   | No | Yes                               | No | Yes  | No | Yes     |
| Location 1   |   |    |   |    |   |    |   |    |                                   |    |  |    |         |
| Location 2   |   |    |   |    |   |    |   |    |                                   |    |  |    |         |
| Location 3   |   |    |   |    |   |    |   |    |                                   |    |  |    |         |

|                               |  |  |  |  |  |  |  |  |  |  |  |  |            |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|------------|
| Comments and Required Actions |  |  |  |  |  |  |  |  |  |  |  |  | Action No. |
| Location 1                    |  |  |  |  |  |  |  |  |  |  |  |  |            |
| Location 2                    |  |  |  |  |  |  |  |  |  |  |  |  |            |
| Location 3                    |  |  |  |  |  |  |  |  |  |  |  |  |            |

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|--|--|---|----|----------------------------------|---------------------------|----------------------------------|----|---|-------------------------------|----------------------------|------------|------------|
| PROJECT INFORMATION NAME AND SITE ADDRESS  |  |   |    |                                  | CONTRACT NUMBER/CO/RTE/PM |                                  |    |   |                               |                            |            |            |
|  |  |   |    |                                  | PROJECT IDENTIFIER NUMBER |                                  |    |   |                               |                            |            |            |
|  |  |   |    |                                  | WDID NUMBER               |                                  |    |   |                               |                            |            |            |
| <b>Waste Management Sanitation Facilities</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  | Located away from drainage courses and water courses? |    | Secured to ground or foundation? |                           | Clean and has adequate capacity? |    | Ground checked for any spills or leaks? |                               | Any spills or leaks found? |            | Photos?    |
|  |  | Yes   | No | Yes                              | No                        | Yes                              | No | Yes                                     | No                            | Yes                        | No         | Yes        |
| Location 1   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Location 2   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Location 3   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Location Number  |  | Comments / Corrective Actions                         |    |                                  |                           |                                  |    |   |                               |                            |            | Action No. |
| 1  |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| 2  |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| 3  |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| <b>Project-specific BMP</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                   |  | Properly located?                                     |    | Properly installed?              |                           | Maintenance or repair needed?    |    | Photos?                                 | Comments and Required Actions |                            |            | Action No. |
|  |  | Yes   | No | Yes                              | No                        | Yes                              | No | Yes                                     |                               |                            |            |            |
| Location 1   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Location 2   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Location 3   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| <b>Project-specific BMP</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                   |  | Properly located?                                     |    | Properly installed?              |                           | Maintenance or repair needed?    |    |   |                               |                            |            | Photos?    |
|  |  | Yes   | No | Yes                              | No                        | Yes                              | No | Yes                                     | No                            | Yes                        | No         |            |
| Location 1   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Location 2   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Location 3   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Comments and Required Actions  |  |   |    |                                  |                           |                                  |    |   |                               |                            | Action No. |            |
| Location 1   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Location 2   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |
| Location 3   |  |   |    |                                  |                           |                                  |    |   |                               |                            |            |            |

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Conduct one visual inspection quarterly in each of the following periods January-March, April-June, July-September, and October-December.

| Drainage Areas | Presence of a non-stormwater discharge? |    | Indication of a prior non-stormwater discharge? |    | Date discharge was observed? | Photos? | Comments and Required Actions | Action No. |
|----------------|---|----|---|----|------------------------------|---------|-------------------------------|------------|
|                | Yes                                     | No | Yes   | No |                              | Yes     |                               |            |
| Location 1     |   |    |   |    |                              |         |                               |            |
| Location 2     |   |    |   |    |                              |         |                               |            |
| Location 3     |   |    |   |    |                              |         |                               |            |

[illegible]

\* Sample non-stormwater discharge at the location where the discharge leaves the jobsite and record location under drainage discharge locations.

| Drainage Discharge Locations | Presence of a non-stormwater discharge? |    | Indication of a prior non-stormwater discharge? |    | Date discharge was observed? | Photos? | Source of non-stormwater discharge and required actions | Action No. |
|------------------------------|---|----|---|----|------------------------------|---------|---|------------|
|                              | Yes                                     | No | Yes   | No |                              | Yes     |   |            |
| Location 1                   |   |    |   |    |                              |         |   |            |
| Location 2                   |   |    |   |    |                              |         |   |            |
| Location 3                   |   |    |   |    |                              |         |   |            |

[illegible]

|   |                           |
|---|---------------------------|
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**During Storm Visual Inspection Requirements, continued**

| <b>Desilting Basins and Other Stormwater Storage</b><br><i>If any water is retained or stored, report the following.</i>   | Presence of floating or suspended materials? |    | Presence of discoloration or turbidity? |    | Presence of odors? |    | If yes to observed pollutants, was sample taken? |    | Source of Observed Pollutants |    |
|--|--|----|---|----|--------------------|----|--|----|-------------------------------|----|
|  | Yes  | No | Yes                                     | No | Yes                | No | Yes  | No |                               |    |
| Location 1   |  |    |   |    |                    |    |  |    |                               |    |
| Location 2   |  |    |   |    |                    |    |  |    |                               |    |
| Location 3   |  |    |   |    |                    |    |  |    |                               |    |
| <b>Non-visible Pollutant Locations</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><i>Inspect locations where disturbed soil or materials are stored or used on sites that contain non-visible pollutants.</i> | Breach, malfunction, leakage, or spill?      |    | Run-on?                                 |    | Flowing discharge? |    | Comments and Required Actions                    |    | Action No.                    |    |
|  | Yes  | No | Yes                                     | No | Yes                | No |  |    |                               |    |
| Location 1   |  |    |   |    |                    |    |  |    |                               |    |
| Location 2   |  |    |   |    |                    |    |  |    |                               |    |
| Location 3   |  |    |   |    |                    |    |  |    |                               |    |
| <b>Desilting Basins and Other Stormwater Storage</b><br><i>If any water is retained or stored, report the following.</i>   | Presence of floating or suspended materials? |    | Presence of discoloration or turbidity? |    | Presence of odors? |    | Discharge sample taken?                          |    | Uncontaminated* sample taken? |    |
|  | Yes  | No | Yes                                     | No | Yes                | No | Yes  | No | Yes                           | No |
| Location 1   |  |    |   |    |                    |    |  |    |                               |    |
| Location 2   |  |    |   |    |                    |    |  |    |                               |    |
| Location 3   |  |    |   |    |                    |    |  |    |                               |    |

\*Sample stormwater that has not come in contact with disturbed soil or stored materials or where materials were used on site for comparison with contaminated sample.



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**Post Storm Visual Inspection Requirements, continued**

| <b>Desilting Basins and Other Stormwater Storage</b><br><i>If any water is retained or stored, report the following.</i>   | Presence of floating or suspended materials? |    | Presence of discoloration or turbidity? |    | Presence of odors? |    | If yes to observed pollutants, was sample taken? |    | Source of Observed Pollutants |    |
|--|--|----|---|----|--------------------|----|--|----|-------------------------------|----|
|  | Yes  | No | Yes                                     | No | Yes                | No | Yes  | No |                               |    |
| Location 1   |  |    |   |    |                    |    |  |    |                               |    |
| Location 2   |  |    |   |    |                    |    |  |    |                               |    |
| Location 3   |  |    |   |    |                    |    |  |    |                               |    |
| <b>Non-visible Pollutant Locations</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><i>Inspect locations where disturbed soil or materials are stored or used on sites that contain non-visible pollutants.</i> | Breach, malfunction, leakage, or spill?      |    | Run-on?                                 |    | Flowing discharge? |    | Comments and Required Actions                    |    | Action No.                    |    |
|  | Yes  | No | Yes                                     | No | Yes                | No |  |    |                               |    |
| Location 1   |  |    |   |    |                    |    |  |    |                               |    |
| Location 2   |  |    |   |    |                    |    |  |    |                               |    |
| Location 3   |  |    |   |    |                    |    |  |    |                               |    |
| <b>Desilting Basins and Other Stormwater Storage</b><br><i>If any water is retained or stored, report the following.</i>   | Presence of floating or suspended materials? |    | Presence of discoloration or turbidity? |    | Presence of odors? |    | Discharge sample taken?                          |    | Uncontaminated* sample taken? |    |
|  | Yes  | No | Yes                                     | No | Yes                | No | Yes  | No | Yes                           | No |
| Location 1   |  |    |   |    |                    |    |  |    |                               |    |
| Location 2   |  |    |   |    |                    |    |  |    |                               |    |
| Location 3   |  |    |   |    |                    |    |  |    |                               |    |

\*Sample stormwater that has not come in contact with disturbed soil or stored materials or where materials were used on site for comparison with contaminated sample.

|   |                           |
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Site Inspection Report General Comments

Are the BMPs installed as required by the Stormwater Pollution Prevention Plan for the phase of construction?  
☐ Yes    ☐ No

Does the SWPPP need to be amended?  
☐ Yes    ☐ No

Does the SWPPP currently reflect the current site conditions and contractor operations?  
☐ Yes    ☐ No

Is hazardous waste stored on the jobsite?  
☐ Yes    ☐ No

Are there water pollution control concerns on the project site not addressed by the comments and required actions shown above for BMPs, based on the field review of the jobsite?  
☐ Yes    ☐ No

*If yes, provide below details and comments and required actions for each location.*

| Location | Water Pollution Control Concern | Comments and Required Actions | Action No. |
|----------|---------------------------------|-------------------------------|------------|
|          |                                 |                               |            |
|          |                                 |                               |            |
|          |                                 |                               |            |
|          |                                 |                               |            |

|   |                           |
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**Stormwater Inspection Report Certification**

I certify under penalty of law that this Stormwater Inspection Report was performed in accordance with the General Permit. The information contained in this inspection report was gathered from a field site inspection. I am aware that Section 309 (c)(4) of the Clean Water Act provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

|                             |                       |
|-----------------------------|-----------------------|
| Stormwater Inspector (Name) | Date Report Completed |
|-----------------------------|-----------------------|

Stormwater Inspector (Signature)

I certify under penalty of law that this Stormwater Inspection Report was performed in accordance with the General Permit by me or under my direction or supervision. The information contained in this inspection report was gathered and evaluated by qualified personnel prior to submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that Section 309 (c)(4) of the Clean Water Act provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

|  |      |
|--|------|
| Water Pollution Control Manager (Name) | Date |
|--|------|

Water Pollution Control Manager (Signature)

**Stormwater Inspection Report Acceptance**

If hazardous waste is stored on the jobsite, the Resident Engineer should notify the District Hazardous Waste Coordinator.

Was the District Hazardous Waste Coordinator notified?

- ☐ N/A, no hazardous waste stored on the jobsite
- ☐ YES, Date \_\_\_\_\_ Time \_\_\_\_\_
- ☐ NO

|                                      |      |
|--------------------------------------|------|
| Accepted by Resident Engineer (Name) | Date |
|--------------------------------------|------|

Resident Engineer (Signature)

---

## Instructions

### General Information

- CGP attachments C, D, and E, Section G.5. require the information on this form.
- If the inspection form does not contain enough lines to report all locations on a jobsite, click on the "Add Item" button so that all locations are inspected and reported.
- Obtain forecasted precipitation information from the National Weather Service Forecast Office website, <http://www.srh.noaa.gov/forecast>.
- Weather information should be the best estimate of beginning of the storm event, duration of the event, and time elapsed since the last storm.
- Rainfall amounts should be recorded from the project site rain gauge.
- "Daily Site Inspection of Best Management Practices" section is to be filled out by water pollution control manager.

### Storm Visual Inspections

- For non-visible pollutant inspections, report on all locations shown in the Stormwater Pollution Prevention Program.

### Required Actions

- All requiring actions reported on this form must also be reported on form CEM-2035, "Stormwater Corrective Actions Summary."
- Locations identified where BMPs are failing or have other shortcomings require implementation of repairs or design changes within 72 hours of identification, and complete BMP repairs or other changes as soon as possible.

**DAILY STORMWATER SITE INSPECTION REPORT**

CEM-2031 (NEW 9/2011)

Page 1 of 3

|   |   |  |
|---|---|--|
| PROJECT INFORMATION NAME AND SITE ADDRESS             | CONTRACT NUMBER/CO/RTE/PM   |  |
|   | PROJECT IDENTIFIER NUMBER   |  |
|   | WDID NUMBER   |  |
| CONTRACTOR NAME AND ADDRESS                           | PROJECT SITE WATER POLLUTION CONTROL<br><input type="checkbox"/> WPCP<br><input type="checkbox"/> SWPPP | SWPPP PROJECT SITE RISK LEVEL<br><input type="checkbox"/> Risk Level 1<br><input type="checkbox"/> Risk Level 2<br><input type="checkbox"/> Risk Level 3 |
| Submitted by contractor (print and sign name)         |   | Date   |
| Water pollution control manager name and company name | Phone number  |  |
|   | Emergency (24/7) phone number   |  |

**General Information**

|  |  |   |
|--|--|---|
| Inspector's Name   |  | Date of Inspection  |
| Weather condition<br><input type="checkbox"/> Clear<br><input type="checkbox"/> Partly cloudy<br><input type="checkbox"/> Cloudy   | Precipitation condition<br><div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> None<br/> <input type="checkbox"/> Misty<br/> <input type="checkbox"/> Light rain<br/> <input type="checkbox"/> Rain         </div> <div> <input type="checkbox"/> Heavy rain<br/> <input type="checkbox"/> Hail<br/> <input type="checkbox"/> Snow         </div> </div> | Wind Condition<br><input type="checkbox"/> None<br><input type="checkbox"/> Less than 5 mph<br><input type="checkbox"/> Greater than 5 mph  |
| Construction Phase<br><input type="checkbox"/> Highway construction<br><input type="checkbox"/> Plant establishment<br><input type="checkbox"/> Suspension of work (inactive site) |  | Site Information<br>_____ Acres total project area<br>_____ Acres total project disturbed soil area<br>_____ Acres current phase disturbed soil area<br>_____ Acres current phase inactive disturbed soil |

| <i>BMPs Requiring Daily Inspection</i>  | SWPPP required BMP       | Activity in progress today | <i>BMP's Requiring Daily Inspection</i>                   | SWPPP required BMP       | Activity in progress today |
|---|--------------------------|----------------------------|---|--------------------------|----------------------------|
| Hazardous Materials and Waste Storage   | <input type="checkbox"/> | <input type="checkbox"/>   | Vehicles and Equipment Storage                            | <input type="checkbox"/> | <input type="checkbox"/>   |
| Hazardous waste generated within last 24 hours?<br><input type="checkbox"/> Yes <input type="checkbox"/> No |                          |                            | Vehicles and Equipment Fueling                            | <input type="checkbox"/> | <input type="checkbox"/>   |
| Hazardous waste inventory updated?<br><input type="checkbox"/> Yes <input type="checkbox"/> No              |                          |                            | Vehicles and Equipment Maintenance                        | <input type="checkbox"/> | <input type="checkbox"/>   |
| Hazardous Waste Transportation and Disposal   | <input type="checkbox"/> | <input type="checkbox"/>   | Vehicles and Equipment Cleaning                           | <input type="checkbox"/> | <input type="checkbox"/>   |
| Hazardous Materials Delivery  | <input type="checkbox"/> | <input type="checkbox"/>   | Dewatering  | <input type="checkbox"/> | <input type="checkbox"/>   |
| Tracking Controls   | <input type="checkbox"/> | <input type="checkbox"/>   | Pile Driving  | <input type="checkbox"/> | <input type="checkbox"/>   |
| Waste Management  | <input type="checkbox"/> | <input type="checkbox"/>   | Materials and Equipment Use Over Water                    | <input type="checkbox"/> | <input type="checkbox"/>   |
| Temporary Concrete Washout  | <input type="checkbox"/> | <input type="checkbox"/>   | Structures Demolition / Removal Over or Adjacent to Water | <input type="checkbox"/> | <input type="checkbox"/>   |
|   |                          |                            | Active Treatment System                                   | <input type="checkbox"/> | <input type="checkbox"/>   |

*BMPs for activities shown as non-active require weekly inspection.*Do you want to perform a weekly inspection today? ☐ Yes ☐ No**ADA Notice**

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**DAILY STORMWATER SITE INSPECTION REPORT**

CEM-2031 (NEW 9/2011)

Page 2 of 3

|   |                           |
|---|---------------------------|
| PROJECT INFORMATION NAME AND SITE ADDRESS | CONTRACT NUMBER/CO/RTE/PM |
|   | PROJECT IDENTIFIER NUMBER |
|   | WDID NUMBER               |

**Site Inspection of Best Management Practices***If the inspection form does not contain enough lines for all locations, attach more pages for the BMP so that all locations are inspected and reported.*

| Activity   | Observations and Comments |
|--|---------------------------|
| <b>Hazardous Materials and Waste Storage</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                     | Not Needed                |
| <b>Hazardous Waste Storage Inventory</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                         | Not Needed                |
| <b>Hazardous Material Delivery and Storage</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                   | Not Needed                |
| <b>Hazardous Waste Disposal and Transportation</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No               | Not Needed                |
| <b>Tracking Controls Access Roads</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                            | Not Needed                |
| <b>Waste Management</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No  | Not Needed                |
| <b>Temporary Concrete Washouts</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                               | Not Needed                |
| <b>Vehicle and Equipment Storage Areas</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                       | Not Needed                |
| <b>Vehicle and Equipment Fueling</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                             | Not Needed                |
| <b>Vehicle and Equipment Maintenance</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                         | Not Needed                |
| <b>Vehicle and Equipment Cleaning</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                            | Not Needed                |
| <b>Dewatering</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No  | Not Needed                |
| <b>Pile Driving</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No  | Not Needed                |
| <b>Material and Equipment Use Over Water</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                     | Not Needed                |
| <b>Structure Demolition or Removal Over or Adjacent to Water</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No | Not Needed                |
| <b>Active Treatment System</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No                                   | Not Needed                |



**DAILY STORMWATER SITE INSPECTION REPORT**

CEM-2031 (NEW 9/2011)

Page 3 of 3

|   |                           |
|---|---------------------------|
| PROJECT INFORMATION NAME AND SITE ADDRESS | CONTRACT NUMBER/CO/RTE/PM |
|   | PROJECT IDENTIFIER NUMBER |
|   | WDID NUMBER               |

**Daily Stormwater Inspection Report Certification**

I certify under penalty of law that this Stormwater Inspection Report was completed in accordance with the General Permit. The information contained in this inspection report was gathered from a field site inspection. I am aware that Section 309 (c)(4) of the Clean Water Act (CWA) provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

|                           |                       |
|---------------------------|-----------------------|
| Stormwater Inspector Name | Date Report Completed |
|---------------------------|-----------------------|

Stormwater Inspector Signature

I certify under penalty of law that this Stormwater Inspection Report was performed in accordance with the General Permit by me or under my direction or supervision. The information contained in this inspection report was gathered and evaluated by qualified personnel before submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that Section 309 (c)(4) of the Clean Water Act (CWA) provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation, or certification.

|                                      |      |
|--------------------------------------|------|
| Water Pollution Control Manager Name | Date |
|--------------------------------------|------|

Water Pollution Control Manager Signature

**Daily Stormwater Inspection Report Acceptance**

|                                      |      |
|--------------------------------------|------|
| Accepted by Resident Engineer (Name) | Date |
|--------------------------------------|------|

Resident Engineer Signature

**DAILY STORMWATER SITE INSPECTION REPORT**

CEM-2031 (NEW 9/2011)

**General Information**

- If the inspection form does not contain enough lines to report all locations on a jobsite, attach additional copies of the form page to report that all locations have been inspected.
- Required actions reported on this form must also be reported on form CEM-2035, "Stormwater Site Inspection Report Corrective Actions Summary."
- Locations identified where BMPs are failing or have other shortcomings require repairs or design changes within 72 hours of identification and complete BMP repairs or other changes as soon as possible.

**FORM**

- Contract Number/Co/Rte/PM  
For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number  
Caltrans projects starting July 1, 2010, will have a Project Identifier Number. For projects without a project identifier number, write N/A in the field.
- WDID Number  
For projects with Water Pollution Control Program, enter "WPCP" in this field.

**STORMWATER SAMPLE FIELD TEST REPORT**

CEM-2052 (REV 12/2013)

Page 1 of 4

|   |  |      |
|---|--|------|
| PROJECT INFORMATION NAME AND SITE ADDRESS     | CONTRACT NUMBER/CO/RTE/PM  |      |
|   | PROJECT IDENTIFIER NUMBER  |      |
|   | WDID NUMBER  |      |
| CONTRACTOR NAME AND ADDRESS                   | PROJECT SITE RISK LEVEL<br><input type="checkbox"/> Risk Level 1 <input type="checkbox"/> N/A. WPCP<br><input type="checkbox"/> Risk Level 2 <input type="checkbox"/> N/A. Project resides in the Lake Tahoe Hydrologic Unit and is regulated under Order No. R6T-2011-0019, NPDES No. CAG616002.<br><input type="checkbox"/> Risk Level 3 |      |
| Submitted by contractor (print and sign name) |  | Date |

**Stormwater Samples Analysis**

|                                       |                                       |
|---------------------------------------|---------------------------------------|
| Date of sampling                      |                                       |
| Sample location identification number | Date of Analysis                      |
| Sample Analyzed By (signature)        | Samples to be analyzed for parameters |
| Sampled Analyzed By (print name)      | <input type="checkbox"/> Turbidity    |
| Analyzer Phone Number                 | <input type="checkbox"/> pH           |
| (    )                                | <input type="checkbox"/> Other _____  |
| Company                               | <input type="checkbox"/> Other _____  |

**Turbidity Analysis Information**

|                    |                       |                        |                  |
|--------------------|-----------------------|------------------------|------------------|
| Meter Manufacturer | Model Number          | Serial Number          | Calibration Date |
| Analytical Method  | Method Reporting Unit | Method Detection Limit |                  |

**pH Analysis Information**

|                       |                       |                        |                  |
|-----------------------|-----------------------|------------------------|------------------|
| pH Meter Manufacturer | Model Number          | Serial Number          | Calibration Date |
| Analytical Method     | Method Reporting Unit | Method Detection Limit |                  |

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|   |                           |
|---|---------------------------|
| PROJECT INFORMATION NAME AND SITE ADDRESS | CONTRACT NUMBER/CO/RTE/PM |
|   | PROJECT IDENTIFIER NUMBER |
|   | WDID NUMBER               |

| Turbidity Calibration Record |                         |                                       |                     |      |                |      |             |                        |       |          |
|------------------------------|-------------------------|---------------------------------------|---------------------|------|----------------|------|-------------|------------------------|-------|----------|
| Date                         | Standard Solution (NTU) | Cal Standard Solution Expiration Date | Initial Calibration |      | Re-Calibration |      | Drift Check |                        | Notes | Initials |
|                              |                         |                                       | Time:               |      | Time:          |      | Time:       |                        |       |          |
|                              |                         |                                       | Cal                 | Read | Cal            | Read | Read        | Acceptable Performance |       |          |
|                              |                         |                                       |                     |      |                |      |             |                        |       |          |
|                              |                         |                                       |                     |      |                |      |             |                        |       |          |
|                              |                         |                                       |                     |      |                |      |             |                        |       |          |

| pH Calibration Record  |                  |                            |   |        |         |         |                 |       |          |
|--|------------------|----------------------------|---|--------|---------|---------|-----------------|-------|----------|
| Buffer Solution Expiration Date: pH4.0 Date      pH7.0 Date      pH10.0 Date |                  |                            |   |        |         |         |                 |       |          |
| Date   | Electrode Number | Temperature at Calibration | Buffers Used for Calibration. Check those that apply. |        |         | Slope % | Re-check pH 7.0 | Notes | Initials |
|  |                  |                            | pH 4.0  | pH 7.0 | pH 10.0 |         |                 |       |          |
|  |                  |                            |   |        |         |         |                 |       |          |
|  |                  |                            |   |        |         |         |                 |       |          |

| Stormwater Sample Analysis Results - Discharge Points |                               |    |     |                       |                  |                        |  |
|---|-------------------------------|----|-----|-----------------------|------------------|------------------------|--|
| Sample Identification                                 | Exception<br>See Instructions | pH | NTU | Parameter Analysis *  |                  |                        |  |
|   |                               |    |     | Time Sample Collected | Time Sample Read | Sample Value and Units |  |
|   |                               |    |     |                       |                  |                        |  |
|   |                               |    |     |                       |                  |                        |  |
|   |                               |    |     |                       |                  |                        |  |
|   |                               |    |     |                       |                  |                        |  |
|   |                               |    |     |                       |                  |                        |  |
| Qualifying Rain Event Daily Average Analysis Result   |                               |    |     |                       |                  |                        |  |

| Stormwater Sample Analysis Results - Run-On Points  |                               |    |     |                       |                  |                        |  |
|---|-------------------------------|----|-----|-----------------------|------------------|------------------------|--|
| Sample Identification                               | Exception<br>See Instructions | pH | NTU | Parameter Analysis *  |                  |                        |  |
|   |                               |    |     | Time Sample Collected | Time Sample Read | Sample Value and Units |  |
|   |                               |    |     |                       |                  |                        |  |
|   |                               |    |     |                       |                  |                        |  |
|   |                               |    |     |                       |                  |                        |  |
|   |                               |    |     |                       |                  |                        |  |
|   |                               |    |     |                       |                  |                        |  |
| Qualifying Rain Event Daily Average Analysis Result |                               |    |     |                       |                  |                        |  |

\* Complete and attach CEM-2058 to document calibration of instruments used to analyze these parameters.

| Stormwater Sample Analysis Results - Receiving Water |                               |    |     |                             |                        |                           |
|--|-------------------------------|----|-----|-----------------------------|------------------------|---------------------------|
| Sample Identification                                | Exception<br>See Instructions | pH | NTU | Parameter Analysis *        |                        |                           |
|  |                               |    |     | Time<br>Sample<br>Collected | Time<br>Sample<br>Read | Sample Value<br>and Units |
|  |                               |    |     |                             |                        |                           |
|  |                               |    |     |                             |                        |                           |
|  |                               |    |     |                             |                        |                           |
|  |                               |    |     |                             |                        |                           |
|  |                               |    |     |                             |                        |                           |
| Qualifying Rain Event Daily Average Analysis Result  |                               |    |     |                             |                        |                           |

| Review and Record Keeping   |   |  |
|---|---|--|
| Test results entered into sampling and testing activity log?<br><br><div><input type="checkbox"/> Yes<br/><input type="checkbox"/> No</div> | Numeric action level exceedance?<br><br><div><input type="checkbox"/> Yes<br/><input type="checkbox"/> No</div> | Receiving water monitoring triggers exceeded?<br><br><div><input type="checkbox"/> Yes<br/><input type="checkbox"/> No</div> |

\* Complete and attach CEM-2058 to document calibration of instruments used to analyze these parameters.

**STORMWATER SAMPLE FIELD TEST REPORT**

CEM-2052 (REV 12/2013)

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## Instructions

**General Information**

- This form is required for compliance with provisions in Section I of Attachments C, D, and E of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002 and provisions of General Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for Lake Tahoe Hydrologic Unit Order No. R6T-2011-0019 NPDES No. CAG616002.
- The Caltrans, *Construction Site Monitoring Program Guidance Manual*, latest edition, contains sampling guidance.
- Complete form CEM-2058 if other parameters are tested.
- Sampling and sample preservation must be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).
- Collect, maintain, and ship samples according to the State Water Resources Control Board's (SWRCB), Surface Water Ambient Monitoring Program's (SWAMP) Quality Assurance Program Plan (QAPrP), latest edition.
- Complete a separate stormwater sample field analysis report daily for each sampling location.
- Include a copy of the completed form in the project Stormwater Pollution Prevention Plan files.

**Form****Contract Number/Co/Rte/PM**

For local agency encroachment permit projects, write the encroachment permit number in the Contract Number field.

**Analysis Result**

Analytical results less than the method detection limit must be reported as "less than the method detection limit".

**Project Identifier Number**

Caltrans projects starting July 1, 2010, will have a Project Identifier Number (PIN). For projects without a PIN, enter N/A in the field.

**Qualifying Rain Event Daily Average Analysis Result**

A minimum of three daily samples are required to calculate the daily average for a qualifying rain event.

**Sample pH Analysis**

Sample pH reading must be done within 15 minutes of sample collection.

**Numeric Action Level Exceedance**

In the event that any daily average effluent samples analysis results exceeds an applicable Numeric Action Level (NAL), complete form CEM-2062 "Numeric Action Level Exceedance Report," and submit all storm event sampling results to the State Water Resources Control Board (SWRCB) no later than ten days after the conclusion of the storm event.

**Receiving Water Monitoring Trigger (RWMT) Exceedance**

In the event that any daily average RWMT is exceeded, complete form CEM-2062, "Numeric Action Level Exceedance Report / Receiving Water Monitoring Trigger Report" and submit all storm event sampling results to the resident engineer within six hours.

Add Exceptions Reasons: \_\_\_\_\_

N - No Run-off at time of inspection

O - Outside of normal business hours

U - Unsafe conditions/unsafe access

**NOTICE OF DISCHARGE REPORT**

CEM-2061 (REV 11/2013)

Page 1 of 4

|   |   |
|---|---|
| PROJECT INFORMATION NAME AND SITE ADDRESS     | CONTRACT NUMBER/CO/RTE/PM<br><br>PROJECT IDENTIFIER NUMBER<br><br>WDID NUMBER   |
| CONTRACTOR NAME AND ADDRESS                   | PROJECT SITE RISK LEVEL<br><div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Risk Level 1<br/> <input type="checkbox"/> Risk Level 2<br/> <input type="checkbox"/> Risk Level 3         </div> <div> <input type="checkbox"/> N/A. WPCP<br/> <input type="checkbox"/> N/A. Project resides in the Lake Tahoe Hydrologic Unit and is regulated under Order No. R6T-2011-0019, NPDES No. CAG616002.         </div> </div> |
| Submitted by contractor (print and sign name) |   |
| Date  |   |

**Notice of Discharge General Information**

|  |  |  |   |  |
|--|--|--|---|--|
| Location   |  |  | Date discharge discovered   |  |
| Discharge identified by stormwater visual site inspection?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NO    |  |  | Discharge type<br><input type="checkbox"/> Stormwater<br><input type="checkbox"/> Authorized non-stormwater<br><input type="checkbox"/> Non-authorized non-stormwater |  |
| Discharge discovered by contractor during daily work?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NO         |  |  | Exceedance of applicable water quality standard<br><input type="checkbox"/> Turbidity<br><input type="checkbox"/> pH<br><input type="checkbox"/> _____                |  |
| Discharge samples taken?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NO                                      |  |  | Date and time water pollution control manager notified of discharge   |  |
| Discharge identified by Regional Water Quality Control Board?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NO |  |  | Date and time resident engineer notified of discharge   |  |
| Discharge identified by State Water Resources Control Board?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NO  |  |  |   |  |

**Storm Event Information***Complete this section for stormwater discharges*

|  |  |   |  |  |
|--|--|---|--|--|
| Start of storm event<br><br>_____<br><i>Date</i><br><br>_____<br><i>Time</i> | End of storm event<br><br>_____<br><i>Date</i><br><br>_____<br><i>Time</i> | Duration of storm event<br><br>_____<br><i>Hours : Minutes.</i> | Storm event precipitation amount recorded from site rain gauge<br><br>_____<br><i>inches</i> | Storm event precipitation amount recorded from governmental rain gauge<br><br>_____<br><i>inches</i> |
|--|--|---|--|--|

**Notice of Discharge Information**

|  |  |
|--|--|
| The nature and cause of the water quality standard exceedance, based on a visual observation of the discharge location                     | Photographs<br><input type="checkbox"/> YES<br><input type="checkbox"/> NO |
| BMPs currently installed at the location of the discharge  | <input type="checkbox"/> YES<br><input type="checkbox"/> NO                |
| Additional BMPs that will be implemented to prevent or reduce pollutants causing or contributing to exceedance of a water quality standard |  |

Implementation schedule for additional BMPs

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**NOTICE OF DISCHARGE REPORT**

CEM-2061 (REV 11/2013)

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|   |                           |
|---|---------------------------|
| PROJECT INFORMATION NAME AND SITE ADDRESS | CONTRACT NUMBER/CO/RTE/PM |
|   | PROJECT IDENTIFIER NUMBER |
|   | WDID NUMBER               |

**Notice of Discharge Information (continued)**

Maintenance or repair of BMPs

Implementation schedule for BMPs maintenance or repair

Other required corrective actions

Implementation schedule for corrective actions

Summary of actions taken to reduce the pollutants causing or contributing to the water quality standard exceedance

**Sampling and Analysis Results**

Required when discharge samples are taken. Attach CEM-2052 or lab results report

- Are discharge samples taken? ☐ YES ☐ NO
- Is CEM-2052 attached? ☐ YES ☐ NO ☐ N/A
- Is lab results report attached? ☐ YES ☐ NO ☐ RESULTS PENDING
- If applicable, provide lab information: lab name, contract name, date samples sent, attach a copy of chain of custody, etc.

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**NOTICE OF DISCHARGE REPORT**

CEM-2061 (REV 11/2013)

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|   |                           |
|---|---------------------------|
| PROJECT INFORMATION NAME AND SITE ADDRESS | CONTRACT NUMBER/CO/RTE/PM |
|   | PROJECT IDENTIFIER NUMBER |
|   | WDID NUMBER               |

**Notice of Discharge Report Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

|   |      |
|---|------|
| Water Pollution Control Manager (name)      | Date |
| Water Pollution Control Manager (signature) |      |

**For Caltrans Use**

|                                      |      |
|--------------------------------------|------|
| Accepted by Resident Engineer (name) | Date |
| Resident Engineer (signature)        |      |

|   |                                  |                            |
|---|----------------------------------|----------------------------|
| Discharge reported by telephone or email to the Regional Water Quality Control Board (RWQCB) within 48 hours of discovery?<br><br>A. Immediately and no later than 24 hours after discovery? <input type="checkbox"/> YES <input type="checkbox"/> NO<br>B. Within 5 working days? <input type="checkbox"/> YES <input type="checkbox"/> NO<br>C. As soon as possible but within 48 hours? <input type="checkbox"/> YES <input type="checkbox"/> NO | Date discharge reported to RWQCB | Resident engineer initials |
| Notice of Discharge Report submitted to RWQCB within 14 days (3 days for District 7 and District 11)?<br><br>A. Within 24 hours? <input type="checkbox"/> YES <input type="checkbox"/> NO<br>B. Within 14 days (3 days for District 7 and 11)? <input type="checkbox"/> YES <input type="checkbox"/> NO   | Date report submitted to RWQCB   | Resident engineer initials |
| Discharge reported orally to the Lahontan RWQCB within 24 hours of discovery?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NO  | Date called Lahontan RWQCB       | Resident engineer initials |
| Electronic submittal of NEL exceedance sample results to Lahontan RWQCB and SMARTS within 5 business days?<br><br><input type="checkbox"/> YES<br><input type="checkbox"/> NO   | Date report submitted            | Resident engineer initials |

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**NOTICE OF DISCHARGE REPORT**

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## Instructions

**General Information**

- This form is required for compliance with provisions in Section E-2, "Receiving Water Limitations for Construction," of the National Pollutant Discharge Elimination System (NPDES) Permit Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Caltrans), Order No. 99-06-DWQ, NPDES No. CAS000003.
- This form is to be completed when the contractor, Caltrans, State Water Resources Control Board, or Regional Water Quality Control Board staff determines that stormwater discharges, authorized non-stormwater discharges, or non-authorized, non-stormwater discharges are causing or contributing to an exceedance of an applicable water quality standard.
- This form is appropriate when there is evidence of a discharge that occurred outside of business hours where no sampling occurred.
- Water quality standards are contained in the Statewide Water Quality Control Plan or applicable Regional Water Quality Control Boards (RWQCBs) Basin Plan.
- Water quality standards are contained in the Statewide Water Quality Control Plan or applicable Regional Water Quality Control Boards (RWQCBs) Basin Plan.
- Sampling guidance is found in the current edition of the *Construction Site Monitoring Program Guidance Manual*.
- Include a copy of the completed form in the project Storm Water Pollution Prevention Plan (SWPPP) files.

**Form**

- **Project Identifier Number**  
Caltrans projects starting July 1, 2010, will have a project identifier number. For projects without a number, write N/A in the field.
- **Contract Number/Co/Rte/PM**  
For encroachment permit projects, write the local agency or private entity encroachment permit number in the contract number field.
- **Storm Event Information**  
Leave section blank if box is checked for either authorized or non-authorized non-stormwater discharge.
- **Discharge Information**  
Do not leave any subsection blank. Caltrans permit specifically requires Caltrans to submit the information in this section to RWQCBs. For non-stormwater discharges, describe the construction operation or activity that caused the discharge.
- **Sampling and Analysis Results**  
Leave this section blank if the no box is checked for discharge samples taken.
- **Analysis Results**  
Analytical results less than the method detection limit shall be reported as "Less than the method detection limit."
- **Analysis Information**  
Leave section blank if the no box is checked for discharge samples taken.
- **Notice of Discharge Report Certification**  
For instruction on reporting timelines, see Section 9.4, Noncompliance Reporting, of Statewide Stormwater Management Plan, May 2003.

## Appendix D: Regional Board General NPDES Permits, WDRS, and Waivers that Regulate Dewatering

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## D.1 Regional Board General NPDES Permits, WDRs, and Waivers

Organized by Regional Board, Table D-1 lists general NPDES permits, WDRs, and waivers that may apply to dewatering discharges.

| Table D-1. Applicability of Regional Board General NPDES Permits, WDRs, and Waivers |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| Regional Board  | General NPDES Permit <sup>1</sup>   | General WDR   | Waiver  | Statewide Low-Threat General WDR (Land)                                   | Utility Vault   | Construction General Permit   |
| Region 01.<br>North Coast   | Order No. R1-2009-0045<br>(NPDES CA0024902);<br>expires: 7/23/2014  | None  | None  | May be applicable<br>Order No. 2003-0003-DWQ; expires: no expiration date | Applicable<br>Order No. 2006-0008-DWQ; expires: 7/19/2011 (extended administratively) | Applicable<br>Order No. 2009-009-DWQ (CGP) (NPDES CAS000002); expires: 9/2/2014   |
| Region 02.<br>San Francisco Bay   | None  | None  | None  | May be applicable   | Applicable  | Applicable  |
| Region 03.<br>Central Coast   | Order No. R3-2011-0223<br>(NPDES CAG993001);<br>expires: 12/1/2016  | None  | Yes, but it does not specifically describe dewatering       | May be applicable   | Applicable  | Applicable  |
| Region 04.<br>Los Angeles   | Order No. R4-2013-0095<br>(NPDES CAG994004);<br>expires: 7/16/2018<br><br>Order No. R4-2013-0043<br>(NPDES CAG914001);<br>expires: 3/7/2018                     | None  | None  | May be applicable   | Applicable  | Applicable  |
| Region 05.<br>Central Valley  | Order R5-2013-0074<br>(NPDES CAG995001)<br>expires: 5/1/2018  | None  | Resolution No. R5-2013-0145 (to land);<br>expires 12/5/2018 | Applicable if the waiver is not applicable                                | Applicable  | Applicable  |
| Region 06.<br>Lahontan  | Order No. R6T-2008-0023<br>(NPDES CAG996001)<br>Expired: 7/23/2013<br>(being renewed, a board meeting will be held during mid-2014 to consider the final order) | No. R6T-2003-0004<br>(Small CGP, Not Tahoe);<br>expires: no expiration date | None  | May be applicable   | Applicable  | Construction General Permit<br><br>R6T-2011-0019 (Tahoe CGP); expires: 4/13/2016<br><br>Small CGP, Not Tahoe (see "General WDR" column) |

Table D-1. Applicability of Regional Board General NPDES Permits, WDRs, and Waivers

| Regional Board               | General NPDES Permit <sup>1</sup>  | General WDR | Waiver  | Statewide Low-Threat General WDR (Land)   | Utility Vault | Construction General Permit  |
|------------------------------|--|-------------|---|---|---------------|--|
| Region 07.<br>Colorado River | Order No. R7-2009-0300 (NPDES CAG997001); expires: 11/18/2014  | None        | None  | Use this WDR, unless it is not applicable. Region 7 prefers using the statewide low-threat general WDR over the general NPDES permit. | Applicable    | Construction General Permit should be used, unless it is not applicable. Region 7 prefers using the Construction General Permit over the general NPDES permit. |
| Region 08.<br>Santa Ana      | Order No. R8-2009-0003 (NPDES CAG998001); expired: 3/1/2014 (extended administratively)<br><br>Order No. R8-2007-0041 (as Amended by Order No. R8-2009-0045; time extended by Order No. R8-2013-0060) (NPDES CAG918002); expires: 12/10/2019 | None        | Resolution No. R8-2013-0015 (Waiver of WDRs) expires: 3/22/2018   | May be applicable   | Applicable    | Applicable   |
| Region 09.<br>San Diego      | Order No. R9-2007-0034 (NPDES CAG919001); expired: 10/10/2012 (extended administratively)<br><br>Order No. R9-2008-0002 (NPDES CAG919002); expired: 3/12/2013 (extended administratively)  | None        | Resolution No. R9-2007-104 (and Conditional Waiver No. 2); expired: 2/3/2014 (a process to renew this is moving forward, dewatering will now be included in Waiver No. 3) | May be applicable   | Applicable    | Applicable   |

The sections that follow contain NPDES permits, WDRS, and waivers that may apply in each Regional Board.

## **D.1 Region 1. North Coast Regional Water Quality Control Board**

Order No. R1-2009-0045. General NPDES Permit No. CA0024902 Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region

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**California Regional Water Quality Control Board  
North Coast Region**

**Linda S. Adams**

*Secretary for  
Environmental Protection*

**Bob Anderson, Chairman**

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**Arnold  
Schwarzenegger**  
*Governor*

**ORDER NO. R1-2009-0045  
GENERAL NPDES PERMIT NO. CA0024902**

**WASTE DISCHARGE REQUIREMENTS  
FOR  
LOW THREAT DISCHARGES  
TO SURFACE WATERS IN THE NORTH COAST REGION**

The following Dischargers are subject to waste discharge requirements as set forth in this Order upon authorization by the California Regional Water Quality Control Board, North Coast Region (Regional Water Board) Executive Officer:

**Table 1. Discharger Information**

|   |   |
|---|---|
| <b>Dischargers</b>  | Discharges from individuals, public agencies, private businesses, and other legal entities (hereafter Dischargers) of clean or relatively pollutant-free wastewaters that pose little or no threat to the quality of waters of the United States. |
| The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified these discharges as minor discharges. |   |

**Table 2. Administrative Information**

|   |               |
|---|---------------|
| This Order/General Permit was adopted by the Regional Water Quality Control Board on:   | July 23, 2009 |
| This Order/ General Permit shall become effective on:   | July 23, 2009 |
| This Order/ General Permit shall expire on:   | July 23, 2014 |
| Enrollees covered under this Order at the time of expiration will continue to be covered until coverage becomes effective under a reissued Order. Upon reissuance of this Order by the Regional Water Board, Dischargers seeking coverage under the reissued Order shall file a revised Notice of Intent. |               |

IT IS HEREBY ORDERED, that Order No. 93-61 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in

division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, dischargers shall comply with the requirements in this Order.

I, Catherine Kuhlman, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on July 23, 2009.

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Catherine Kuhlman, Executive Officer

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## **I. DISCHARGE INFORMATION**

### **A. Low Threat Discharges**

Individuals, public agencies, private businesses, and other entities often need to discharge to surface waters relatively pollutant-free wastewater that poses little threat to water quality. Some discharges may need minimal treatment, such as settling out sediment or dechlorination, in order to remove specific pollutants prior to discharge and/or application of best management practices (BMPs) to ensure that the discharge does not create conditions of pollution or nuisance.

The purpose of this Order (hereafter, General Permit or this Order) is to regulate discharges of low threat wastewaters from a discrete point source to surface waters of the North Coast Region. A low threat discharge is defined as a planned, short-term and/or minimized volume discharge from a definable project that results in a point source discharge where the discharge requires a minimal level of treatment and/or is controlled to eliminate or reduce pollutants and minimize volume and discharge rates through implementation of best management practices (BMPs). Discharges that may receive authorization for coverage under this General Permit shall not contain pollutants in concentrations above applicable water quality objectives or criteria and must be consistent with applicable State and federal antidegradation policies.

Many of these low threat discharges are short-term and may be completed in a period of one day to one week. Examples of short term discharges include ground water from well development or potable water from water supply maintenance projects. Although these projects occur over very short periods of time, the discharges may involve high flows relative to the receiving water flow and may involve volumes on the order of a thousand gallons per day to over one million gallons per day.

Other types of low threat discharges, such as construction dewatering projects, may occur over a longer period of time, sometimes months and occasionally periods that exceed one year. These discharges typically involve the discharge of smaller daily volumes. Some discharges, such as subterranean seepage dewatering (e.g., dewatering of structures situated below ground level such as basements or roadways) may occur seasonally and typically during the wet-weather season. Discharge flows may vary depending on the intensity of the wet-weather season.

Duration and flow rate are not necessarily limiting factors in the applicability of this General Permit for a specific surface water discharge. The discharge duration, flow rate, and volume must be disclosed and evaluated in relation to the receiving water flow rate and characteristics in order for the Regional Water Board to determine if the discharge will have a low threat to water quality. With proper management measures, many of these higher volume discharges can be done in a manner that poses a low threat to water quality.

It is anticipated that some enrollees under this General Permit will need to request an exception to the Basin Plan's discharge rate limitations that requires discharges to the Russian, Mad and Eel Rivers to be one percent or less of the receiving stream flow unless an exception is granted in accordance with the criteria identified in Section 4 Implementation Measures of the Basin Plan (Point Source Measures, Waste Discharge Prohibitions, North Coastal Basin, Item 5). Section II.A.3 of this General Permit identifies the criteria that a discharger must meet in requesting an exception to the one percent flow limitation.

In addition, the Basin Plan currently prohibits any point source discharges during the period of May 15 to September 30 of each year. If the Regional Water Board adopts an amendment to allow exceptions to this point source discharge prohibition for low threat discharges and the amendment is approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law and the USEPA, this General Permit contains provisions that would allow the Regional Water Board Executive Officer to approve exceptions to the point source discharge prohibition for low threat discharges when a Discharger meets the eligibility criteria identified in section II.C.2 of this General Permit.

Water suppliers may have numerous planned projects in the same watershed with similar discharge characteristics. For example, a water supplier may contract to have maintenance performed on multiple water storage reservoirs or on large sections of pipeline that are all conducted under a common workplan or contract. For the purpose of this Order, these multiple discharges from water suppliers may be considered under a single application provided that the application contains adequate information and justification to ensure that enrollment of multiple discharge points from similar projects meet the requirements of this General Permit. A water supplier may choose to develop a monitoring program that focuses on monitoring representative discharge points for the entire project (within the same watershed). Public and private water suppliers, such as irrigation districts, water districts, and water agencies, may apply for coverage of multiple discharge points under this General Permit.

## **B. Eligible Discharges**

### **1. Eligible Discharges.**

Low threat discharges that may be authorized by this General Permit are relatively pollutant-free wastewaters that pose little threat to water quality when treated with simple, low technology treatments and/or controlled with BMPs to eliminate or reduce pollutants and minimize volume and discharge rates. Discharges to surface waters of the North Coast Region that meet the definition of “low threat,” above, shall be eligible for coverage under the General Permit and may include, but are not limited to, the following categories of discharges.

- a. Construction dewatering of water where sediment and naturally occurring parameters (e.g., naturally occurring metals or salts, temperature, pH, etc.) in area ground water are the only pollutants of concern;
- b. Discharges resulting from maintenance, disinfection, cleaning or flushing of water supply wells, pipelines, tanks and reservoirs where chlorine, chlorine by-products, and naturally occurring parameters (e.g., naturally occurring metals, temperature, pH, etc.) in the water supply are the only pollutants of concern;
- c. Discharges resulting from well development, test pumping, maintenance, and purging of water supply or geothermal wells where sediment and naturally occurring parameters (e.g. naturally occurring metals or salts, temperature, pH, etc.) in area ground water and chlorine and chlorine disinfection by-products from well disinfection are the only pollutants of concern;
- d. Hydrostatic testing, maintenance, repair, and disinfection of potable water supply pipelines, tanks, and reservoirs, where chlorine, chlorine by-products, and naturally occurring parameters (e.g., naturally occurring metals, temperature, pH, etc.) in the water supply are the only pollutants of concern;
- e. Hydrostatic testing of newly constructed pipelines, tanks, and reservoirs used for purposes other than potable water supplies, where chlorine, chlorine by-products and naturally occurring parameters (e.g., naturally occurring metals, temperature, pH, etc.) in the water supply are the only pollutants of concern;
- f. Subterranean seepage dewatering (dewatering of structures situated below ground level such as basements, roadways, etc), where sediment and naturally occurring parameters (e.g., naturally occurring metals or salts, temperature, pH, etc.) in the area groundwater are the only pollutants of concern;
- g. Discharges resulting from dewatering of uncontaminated dredge spoils, where sediment and naturally occurring parameters (e.g., naturally occurring metals or salts, temperature, pH, etc.) are the only pollutants of concern;

- h. Other similar types of point source discharges that pose a low threat to water quality, yet technically must be regulated under an NPDES permit.

Proposed low-threat discharges to storm drains that are regulated under an municipal separate storm sewer system MS4 permit may be regulated under the MS4 permit provided that the MS4 permittee has developed a programmatic BMP plan that applies to non-storm water discharges to the permitted storm drain system that has been approved by the Regional Water Board (Phase 1 MS4 permittees) or Regional Water Board Executive Officer (Phase 2 MS4 permittees). On a case-by-case basis, it may be determined that proposed discharges to a permitted MS4 storm drain system may be more effectively regulated through enrollment under this Low Threat General Permit.

## 2. Ineligible Discharges

The following discharges shall not be eligible for coverage under the General Permit:

- a. Discharges which, based on the judgment of the Regional Water Board Executive Officer, do not meet the definition of "low threat" as contemplated by this General Permit.
- b. Discharges that are insufficiently characterized and thereby preclude a determination as to suitability for coverage under the General Permit;
- c. On-going high volume discharges. Discharges that fall into this category would require individual permit coverage.
- d. Discharges that would require extensive biological or chemical treatment in order to meet effluent limitations or water quality objectives or criteria;
- e. Discharges that cause acute or chronic toxicity to aquatic life in the receiving waters.
- f. Discharges from groundwater cleanup projects, including but not limited to sites polluted by industrial activities, above ground or underground leaking tanks, and agricultural (e.g., farming) practices. Discharges of highly treated groundwater to surface waters following extraction and cleanup of groundwater polluted with petroleum hydrocarbons and volatile organic compounds should apply for coverage under Order No. R1-2006-0048 or other applicable NPDES permits.
- g. Discharges of groundwater which have been polluted by industrial activities, above ground or underground leaking tanks, or agricultural (e.g., farming) practices, even if the project and/or proponent has no connection with the contamination.

- h. Discharges that contain chemical pollutants or physical or biological properties that may adversely impact beneficial uses and/or exceed any applicable water quality objective or criteria. Chemical pollutants of concern include, but are not limited to industrial chemicals, chlorinated hydrocarbons, or organic wastes, herbicides, pesticides, oil and grease, bacteria, radioactivity, and salinity. Biological properties of concern include, but are not limited to bacteria, algae, or undesirable aquatic organisms (e.g., mosquito larvae or exotic species). Physical properties of concern, include, but are not limited to temperature, dissolved oxygen, pH, conductivity, and turbidity (sediment).
- i. Discharges that would create nuisance conditions such as vector problems or localized flooding that cannot be mitigated through the implementation of BMPs.
- j. Discharges that could adversely affect a listed endangered or threatened species or their critical habitat.
- k. Discharges to Areas of Special Biological Significance.
- l. Discharges that could have a significant impact on biological or cultural resources, aesthetics, or air quality that cannot be mitigated.
- m. Discharges that could significantly alter the existing drainage pattern of the discharge site or surrounding area or result in downstream erosion.
- n. Discharges that do not consist solely of low threat wastewater. If a low threat discharge mixes with other wastewater (e.g., storm water, domestic wastewater, or industrial process wastewater) prior to contacting receiving water, the other wastewater must be covered under an NPDES permit, if required.
- o. Discharges from industrial facilities that are subject to Effluent Limitations Guidelines promulgated by the USEPA pursuant to CWA section 304 (b), which limits the discharge of pollutants from these facilities.
- p. Discharges that are not consistent with State and federal antidegradation policies.
- q. Discharges that result from releases from pipeline breaks or other spills.
- r. Discharges to a sanitary sewer or discharges covered by an individual NPDES permit.

Owners and operators of facilities that are deemed ineligible for coverage under the General Permit may seek authorization from the Regional Water Board to discharge under an individual NPDES permit or a State or Regional Water Board general permit.



### C. Pollutants of Concern

Potential pollutants of concern for the discharge categories identified in Section I.B of this General Permit are summarized in Table 3 below.

**Table 3 Pollutants of Concern by Discharge Type**

| Type of Discharge   | Pollutants of Concern   |
|---|---|
| Construction dewatering   | <ul style="list-style-type: none"> <li>• Sediments</li> <li>• Turbidity</li> <li>• Construction Materials</li> <li>• Total petroleum hydrocarbons</li> <li>• Metals (naturally occurring)<sup>1</sup></li> <li>• High temperature</li> </ul>            |
| Discharges from potable water sources<br><br>Maintenance and repair of water supply structures (e.g., pipelines, tanks, reservoirs) | <ul style="list-style-type: none"> <li>• Chlorine and associated trihalomethanes</li> <li>• Metals<sup>2</sup></li> <li>• Sediments</li> <li>• Total dissolved solids</li> <li>• Minor adhesives</li> <li>• Scale, rust, corrosion products</li> </ul>  |
| Development and test pumping of water supply wells  | <ul style="list-style-type: none"> <li>• Sediments</li> <li>• Total dissolved solids</li> <li>• Chlorine and associated trihalomethanes</li> <li>• Metals (naturally occurring)<sup>2</sup></li> <li>• Glues (Volatile organic hydrocarbons)</li> </ul> |
| Hydrostatic testing of new pipelines, tanks, reservoirs, etc., used for purposed other than potable water supply                    | <ul style="list-style-type: none"> <li>• Scale and corrosion products</li> <li>• Total petroleum hydrocarbons</li> <li>• Metals<sup>3</sup></li> </ul>  |
| Geothermal well testing   | <ul style="list-style-type: none"> <li>• Sediments</li> <li>• Total dissolved solids</li> <li>• High Temperature</li> <li>• Metals</li> </ul>   |
| Subterranean seepage dewatering (e.g., dewatering of structures situated below ground level such as basements, roadways, etc)       | <ul style="list-style-type: none"> <li>• Sediments</li> <li>• Total dissolved solids</li> <li>• Metals (naturally occurring)<sup>2</sup></li> <li>• Dissolved Oxygen</li> </ul>   |
| Dewatering of dredge spoils   | <ul style="list-style-type: none"> <li>• Sediment</li> <li>• Turbidity</li> <li>• Nutrients</li> <li>• Metals (naturally occurring)<sup>2</sup></li> <li>• Petroleum hydrocarbons</li> <li>• Grease and oil</li> </ul>                                  |

<sup>1</sup> Metals, including, but not limited to arsenic and iron that are naturally occurring in local groundwater as a result of local geology but at concentrations below water quality objectives.

<sup>2</sup> e.g., arsenic, iron, copper, lead, zinc: naturally occurring in groundwater used for water supply or picked up from metallic surfaces of pipes and storage tanks

## **II. APPLICATION/ENROLLMENT REQUIREMENTS**

### **A. Application for Coverage Under the General Permit**

1. Notice of Intent. It is the responsibility of the Discharger to obtain coverage under this General Permit prior to commencement of any discharge to surface waters. To apply for coverage under this General Permit, which also serves as a National Pollutant Discharge Elimination System (NPDES) Permit, the Discharger must submit a complete Notice of Intent (NOI), including all of the information required by the NOI, as detailed in Attachment A, to the Regional Water Board Executive Officer and the appropriate first annual fee as required by Title 23 of the California Code of Regulations, Division 3, Chapter 9, Article 1. All dischargers seeking coverage under the General Permit must submit a Best Management Practices (BMP) and Pollution Prevention (PP) Plan as outlined in Attachment A-1. Water suppliers seeking permit coverage for a project with more than one proposed discharge point may submit a Pollution Prevention and Monitoring and Reporting Plan (PPMRP) with the Notice of Intent, as outlined in Attachment A-2. The Discharger's PPMRP, upon approval by the Regional Water Board Executive Officer, may be used in lieu of the monitoring and reporting program attached to this General Permit.
2. If the proposed discharge involves the discharge of ground water, the applicant must contact Regional Water Board Cleanups Unit staff to identify whether there are known ground water contamination sites within one half ( $\frac{1}{2}$ ) mile of the proposed project. If known ground water contamination sites exist within  $\frac{1}{2}$  mile of the proposed project, the Discharger must demonstrate that ground water pumping will not capture the pollutants from the ground water contamination site.
3. If the Discharger proposes a discharge to the Mad, Eel or Russian Rivers or their tributaries that will exceed one percent of the receiving water flow, the Discharger may request that the Regional Water Board Executive Officer grant an exception to the one percent discharge limitation and must submit information to demonstrate that it meets the following eligibility criteria:
  - a. The wastewater treatment facility shall be reliable;
  - b. The discharge of waste shall be limited to rates and constituent levels which protect the beneficial uses of the receiving waters;
  - c. The exception shall be limited to that increment of wastewater which remains after reasonable alternatives for reclamation have been addressed;
  - d. The exception shall comply with State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality Waters in

**4. Submittal Deadlines.**

- a. Dischargers that were authorized to discharge under Order No. 93-61 shall retain coverage under this General Permit but shall submit a completed NOI to the Regional Water Board within 30 days following the effective date of this General Permit. If an existing authorized Discharger does not submit an NOI in accordance with the provision herein, authorization to discharge will automatically be terminated, and the discharge shall be prohibited.
- b. Dischargers who are seeking authorization to discharge under the General Permit for the first time shall submit an NOI at least 90 days in advance of the proposed project start date to provide time for review of the NOI and submittal of additional information that may be necessary to complete the NOI. This time period may be waived by the Regional Water Board Executive Officer.

**B. Regional Water Board Authorization**

1. Existing Dischargers. Following review of a completed NOI, the Executive Officer shall provide written notice to an existing Discharger that coverage under the General Permit will continue or that an individual permit is required for the discharge.
2. New Dischargers. Following review of a completed NOI, the Executive Officer shall provide written notice to a new Discharger that:
  - a. The proposed discharge is eligible for coverage under this General Permit and that a 30-day public notice period has started. The Regional Water Board Executive Officer will place a public notice on the Regional Water Board's website providing a 30-day public notice of the Regional Water Board's intent to provide coverage under this General Permit. The Regional Water Board Executive Officer may also place a public notice in a newspaper of general circulation and/or mail the notice to adjacent property owners and nearby residences and businesses, and interested agencies and parties; or
  - b. Coverage under this General Permit shall be considered at a regularly scheduled Regional Water Board hearing; or
  - c. The proposed discharge is ineligible for coverage under this General Permit and whether or not the discharge is eligible for coverage under an individual permit.
3. At the end of the 30-day public notice period identified in section II.B.2.a. above, the Executive Officer shall provide written notice to the Discharger that:

- a. No significant comments were received and coverage under this General Permit is granted; or
  - b. Significant comments were received and coverage under this General Permit shall be considered at a regularly scheduled Regional Water Board hearing; or
  - c. Significant comments were received and an individual permit is required for the discharge.
4. In no case may a discharge occur until the applicant receives written notification of coverage under this General Permit or another permit issued or adopted by the State or Regional Water Board.
5. All Dischargers. Pursuant to NPDES regulations at 40 CFR 122.28 (b) (2), the Executive Officer has the authority to require a Discharger to comply with the conditions of this General Permit. Such a Discharger shall be obligated to meet all discharge prohibitions effluent limitations, receiving water limitations, provisions, and monitoring and reporting requirements of the General Permit.
6. Failure to Submit an NOI and/or filing fee prior to discharge. Dischargers who fail to submit an NOI and/or filing fee identified in section II.B of this Order prior to initiating a discharge will be deemed out of compliance with the General Permit and subject to all penalties allowable pursuant to applicable provisions of the Clean Water Act and the California Water Code, including section 13385 thereof.
7. If multiple discharges (either by the same or different dischargers) are proposed into the same receiving water during a similar time period, the Regional Water Board Executive Officer may condition the timing of the permit coverage for one or more discharges, if necessary, to reduce potential cumulative impacts.
8. Coverage under the General Permit may be denied or revoked if it is determined that:
  - a. There are alternative means to discharge the wastewater; or
  - b. A discharge contains pollutants that may adversely affect the beneficial uses of the receiving water and/or exceed applicable water quality objectives or criteria; or
  - c. The discharge is adversely impacting the beneficial uses of the receiving water and/or causing an exceedance of applicable water quality objectives or criteria; or
  - d. The Discharger violates provisions of this General Permit or the discharge is not consistent with information provided in the NOI.

### **C. Eligibility Criteria**

1. This General Permit covers low threat discharges to surface waters.
2. To be authorized by this General Permit, Dischargers must demonstrate that the discharge or proposed discharge meets the following criteria:
  - a. Pollutant concentrations in the discharge will meet water quality objectives and criteria and will not cause, have a reasonable potential to cause, or substantially contribute to an excursion above any applicable federal water quality criterion established by USEPA pursuant to CWA section 303;
  - b. Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or substantially contribute to an excursion above any water quality objective or criteria adopted by the Regional Water Board or State Water Resources Control Board (State Water Board);
  - c. The discharge does not cause acute or chronic toxicity in the receiving water;
  - d. The discharge does not cause or substantially contribute to impairment of beneficial uses of the receiving water. The discharge shall not cause or substantially contribute to adverse impacts on the receiving water, including, but not limited to, erosion, adverse impacts on aquatic life, or creation of undesirable nuisance conditions (e.g., algae, vectors, localized flooding); and
  - e. The discharge is necessary because no feasible alternative to the discharge (reclamation, evaporation, infiltration, discharge to a sanitary sewer system, etc) is available.
  - f. The discharge is limited to that increment of wastewater that remains after implementation of all reasonable alternatives for reclamation or disposal.
  - g. The Discharger shall comply with all the terms and provisions of this General Permit.

### **D. Termination of Coverage**

1. Within 30 days following permanent termination of a discharge or discharges authorized under this General Permit, the Discharger shall submit the Notice of Termination (NOT) of Coverage Under the General Permit provided as Attachment G. Upon submission of NOT, the Discharger shall no longer be authorized to discharge wastewater covered by this General Permit. The Discharger is subject to the terms and conditions of this General Permit and is responsible for submitting the annual fee associated with this General Permit until the Discharger submits the NOT.

2. When the Regional Water Board issues an individual NPDES permit or Waste Discharge Requirements (WDRs) with more specific requirements to a Discharger for a discharge that is otherwise covered by this Order, the applicability of this General Permit to that Discharger is automatically terminated on the effective date of the individual permit or WDRs.
3. Authorization to discharge shall be terminated 30 days after the effective date of this General Permit for those Dischargers covered by Order No. 93-61, unless the Discharger submits an NOI as required by section II.A.2.i of this General Permit and receives a written Notice of Applicability for coverage under this General Permit from the Executive Officer.

### **III. FINDINGS**

The California Regional Water Quality Control Board, North Coast Region (hereinafter, the Regional Water Board), finds:

#### **A. Background.**

1. On May 27, 1993, the Regional Water Board adopted Order No. 93-61 (General NPDES Permit No. CA0024902) – Waste Discharge Requirements for Discharges of Groundwater to Surface Water Related to Construction and Subsurface Seepage Dewatering Activities in the North Coast Region. The conditions of Order No. 93-61 were automatically continued past the General Permit's original expiration date in accordance with State Water Board regulations at Title 23 of the California Code of Regulations, Section 2235.4. This Order now reissues the requirements of the General Permit.
2. On September 22, 1989, a Memorandum of Agreement executed by the USEPA and the State Water Resources Control Board (State Water Board) authorized and established procedures for the State Water Board to issue general NPDES permits pursuant to NPDES regulations at 40 CFR 122.28 and 122.44.
3. NPDES regulations at 40 CFR 122.28 provide for the issuance of general NPDES permits to regulate a category of point sources, which:
  1. Involve the same or substantially similar types of operations;
  2. Discharge the same type of wastes;
  3. Require the same type of effluent limitations or operating conditions;
  4. Require similar monitoring; and

5. Are more appropriately regulated under a general permit rather than individual permits.
4. Water Code section 13263 (i) authorizes the Regional Water Board to prescribe general waste discharge requirements for a category of discharges, which:
  - a. Are produced by the same or similar operations;
  - b. Involve the same or similar types of waste;
  - c. Require the same or similar treatment standards; and
  - d. Are more appropriately regulated under general discharge requirements.

**B. Industry/Facility Description.**

Requests for authorization to discharge under this General Permit may come from individuals, public agencies, private businesses, and other legal entities. Requests are typically related to construction dewatering or water supply projects but may include other types of projects that may have relatively pollutant-free wastewater to dispose of.

The purpose of this General Permit is to regulate discharges to surface waters of the North Coast Region, including inland and ocean waters, which are low threat in nature. As described previously, low threat discharges are planned, short-term and/or low volume discharges from definable projects with discrete point source discharges where the discharge is controlled to eliminate or reduce pollutants and minimize volume and discharge rates through implementation of BMPs. Discharges covered under this General Permit shall not contain pollutants in concentrations that exceed applicable water quality objectives and criteria.

The determination of “low threat” and eligibility for coverage under the General Permit shall be made solely by the Regional Water Board Executive Officer and shall be based on information provided by a discharger in its application (Notice of Intent or NOI) for coverage, the Regional Water Board’s understanding of beneficial uses and water quality objectives, and all other site-specific information that is available for such a determination. In general, determination of eligibility for coverage will be based on information provided by a discharger in response to section II.A. of the General Permit (Application for Coverage Under the General Permit). Discharge flow characteristics, and anticipated flow rates and volumes, shall be specified in the NOI. Discharge and receiving water flow rates shall be considered but are not the sole or definitive factors in assessing the eligibility of a specific discharge for coverage under the General Permit.

- C. Legal Authorities.** This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code

(commencing with section 13370). It shall serve as a general NPDES permit for low threat point source discharges to surface waters of the North Coast Region. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information required by monitoring and reporting programs of Order No. 93-61 and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for requirements of the Order, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Pursuant to California Water Code section 13389, the action by the Regional Water Board to adopt Waste Discharge/NPDES Requirements does not trigger the requirements of CEQA, Public Resources Code sections 21100-21177, except requirements for “new sources”<sup>3</sup> as defined in the Federal Water Pollution Control Act. For any “new source” compliance with CEQA must be achieved before coverage under this General Order can be authorized for the project.
- F. Technology-Based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations<sup>4</sup>, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The technology-based requirements of this Order have been established using Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

Because there are no applicable Effluent Limitation Guidelines (technology-based requirements established by USEPA) for low threat discharges authorized by this Order, the provisions of this General Permit require implementation of BMPs to control and abate the discharge of pollutants to surface waters and to achieve compliance with Best Available Technology Economically Achievable (BAT)/Best Conventional Pollutant Control Technology (BCT) requirements and compliance with Basin Plan water quality objectives. Discharges enrolled under this Order are expected to comply with all water quality objectives with implementation of BMPs.

- G. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

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<sup>3</sup> A “new source” is a discharge type for which USEPA has issued New Source Performance Standards. A “new source” does not mean a new discharge.

<sup>4</sup> All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.



Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the State's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

**H. Water Quality Control Plans.** The following water quality control plans are applicable to this General Permit.

**Basin Plan.** The Regional Water Board adopted a *Water Quality Control Plan for the North Coast Region* (hereinafter the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. Beneficial uses are designated for all waters of the North Coast Region and are designated for coastal and inland waters, wetlands, and ground waters. Beneficial uses of any water body specifically identified in the Basin Plan generally apply to its tributary streams. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Applicable beneficial uses of surface waters for the North Coast Region are listed below.

- Municipal and Domestic Supply (MUN)
- Agricultural Supply (AGR)
- Industrial Service Supply (IND)
- Industrial Process Supply (PRO)
- Groundwater Recharge (GWR)
- Freshwater Replenishment (FRSH)
- Navigation (NAV)
- Hydropower Generation (POW)
- Water Contact Recreation (REC-1)
- Non-Contact Water Recreation (REC-2)
- Commercial and Sport Fishing (COMM)
- Aquaculture (AQUA)
- Warm Freshwater Habitat (WARM)
- Cold Freshwater Habitat (COLD)
- Inland Saline Water Habitat (SAL)

- Estuarine Habitat (EST)
- Marine Habitat (MAR)
- Wildlife Habitat (WILD)
- Preservation of Areas of Special Biological Significance (ASBS)
- Rare, Threatened, or Endangered Species (RARE)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Shellfish Harvesting (SHELL)
- Water Quality Enhancement (WQE)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Wetland Habitat (WET)
- Native American Culture (CUL)
- Subsistence Fishing (FISH)

Requirements of this Order protect beneficial uses by implementing water quality objectives and criteria, which are designed to protect such uses.

**Thermal Plan.** The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal and interstate waters and enclosed bays and estuaries. Requirements of this Order implement the Thermal Plan for these waters.

**California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the Ocean. The Ocean Plan requires that the following beneficial uses of ocean waters of the State be protected. Applicable beneficial uses of ocean waters for the North Coast Region are listed below.

- Industrial Water Supply
- Water Contact and Non-contact Recreation, Including Aesthetic Enjoyment
- Navigation
- Commercial and Sport Fishing
- Mariculture
- Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS)
- Protection of Rare and Endangered Species

- Marine Habitat
- Fish Migration
- Fish Spawning and Shellfish Harvesting

In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan.

- I. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants, which are applicable to inland surface waters, enclosed bays, and estuaries of the State.
- J. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

If pollutants are present that may cause or substantially contribute to violations of an applicable federal water quality criterion for receiving waters or numeric effluent limits are deemed necessary, coverage under the General Permit will be denied or revoked by the Regional Water Board Executive Officer, as this General Permit does not contain numeric effluent limitations for priority pollutants.

- K. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception had been granted under of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric limitations for that

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regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

**M. Stringency of Requirements for Individual Pollutants.** As discussed in Finding III.F above, technology based limitations were established using BPJ and consist of BMPs to achieve BAT/BCT. This Order also contains several water quality-based effluent limitations for individual pollutants. These effluent limitations and requirements are consistent with the requirements of the CWA. Derivation of effluent limitations is discussed in sections V.B and V.C of the Fact Sheet.

Water quality-based effluent limitations for chlorine residual and pH have been scientifically derived to implement water quality objectives that protect beneficial uses. The water quality-based effluent limitations for settleable solids and total dissolved solids are based on the Basin Plan, as discussed further in sections V.C.4.a.ii and V.C.4.a.iv of the Fact Sheet. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000, and/or the Ocean Plan, which was approved by USEPA on February 14, 2006. All beneficial uses and water quality objectives contained in the Basin and Ocean Plans were approved under State law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to section 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

In addition, this Order requires the implementation of best management practices in conjunction with effluent limitations to protect water quality and beneficial uses.

**N. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water

Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provisions of section 131.12 and State Water Board Resolution No. 68-16.

- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.
- P. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- Q. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to all dischargers authorized under the General Permit. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- S. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV. B, IV. C, and V. C of this General Permit are included to implement State law only. These provisions/requirements are not required or authorized under the

federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

**T. Notification of Interested Parties.** The Regional Water Board has notified authorized dischargers and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the low threat discharges and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

**U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the General Permit. Details of the Public Hearing are provided in the Fact Sheet of this Order.

#### IV. DISCHARGE PROHIBITIONS

- A. The discharge of wastes, other than those that meet the eligibility criteria in Section I.B and II.C of this Order are prohibited unless the Discharger obtains coverage under another general or individual permit that regulates the discharge of such wastes.
- B. The creation of a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code, is prohibited.
- C. Any low threat discharge in excess of the flow rate described by the Discharger in its NOI, or as authorized by the Executive Officer, is prohibited.
- D. Discharges containing pollutants which exceed applicable water quality objectives or criteria, or discharges which, wholly or in combination with other discharges, cause or substantially contribute to exceedances of applicable water quality criteria or objectives established by the Basin Plan, Ocean Plan or Clean Water Act for surface waters are prohibited and are precluded from coverage under this General Permit. Applicable numeric water quality criteria and objectives are presented in Attachment B of this Order.
- E. The discharge of polluted groundwater to waters of the State is prohibited.
- F. The discharge from the treatment facility at construction dewatering sites or other similar low-threat discharges of detectable levels of petroleum, petroleum constituents or volatile halogenated compounds is prohibited.<sup>5</sup>

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<sup>5</sup> For the purpose of this General Permit, levels of detection are as follows:

| <u>Constituent</u>     | <u>Units</u> | <u>Detection Limit</u> |
|------------------------|--------------|------------------------|
| Petroleum Hydrocarbons | ug/L         | 50                     |
| Benzene                | ug/L         | 0.5                    |
| Toluene                | ug/L         | 0.5                    |
| Xylene                 | ug.L         | 0.5                    |

- G. The discharge of domestic and/or agricultural and/or commercial and/or industrial process wastes is prohibited.
- H. The discharge of an effluent with constituents in excess of applicable limits required by any watershed-specific TMDL, is prohibited.
- I. The contact of low threat discharges with contaminated soil or groundwater is prohibited.
- J. The discharge of low threat wastewater effluent to surface waters is prohibited during the period of May 15 through September 30 of each year in the Mad, Russian and Eel Rivers and their tributaries and year round in all other surface waters, unless the Regional Water Board Executive Officer grants an exception to this seasonal discharge prohibition.<sup>6</sup>
- K. During the period of October 1 through May 14, discharges of treated wastewater to the Mad, Eel or Russian River or tributaries thereto shall not exceed one percent of the receiving water flow, unless the Regional Water Board Executive Officer grants an exception to this discharge flow limitation. Discharges of treated wastewater to surface waters are prohibited year round to all other waterbodies in the North Coast Region, unless the Regional Water Board Executive Officer grants an exception to the year-round discharge prohibition.<sup>7</sup>

## V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

### A. Effluent Limitations

The discharge of pollutants shall be controlled and minimized through the implementation of treatment and best management practices identified in the NOI and BMP/PP Plan and shall not exceed the following effluent limitations:

#### 1. Final Effluent Limitations For Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries

- a. Total Residual Chlorine. (Applicable to any discharge of water that was chlorinated) The discharge shall not contain total residual chlorine in excess of the following concentrations:<sup>7</sup>
  - i. 0.011 mg/L, as a 4-day average; and

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|                                |      |     |
|--------------------------------|------|-----|
| Ethylbenzene                   | ug/L | 0.5 |
| Volatile Halogenated Compounds | ug/L | 0.5 |

<sup>6</sup> The Regional Water Board Executive Officer will only be able to grant exceptions to the Basin Plan seasonal discharge prohibitions upon adoption of the Low Threat Basin Plan Amendment (see discussion in Fact Sheet section I.A (page F-4))

<sup>7</sup> For waters with different pH limits set in Table 3-1 of the Basin Plan (Attachment B-3 of this Order), the pH limits established in Attachment B-3 for that particular water body shall apply.

- ii. 0.019 mg/L, as a 1-hour average.
- b. Settleable Solids. Effluent shall not contain any measurable settleable solids, using a detection limit of 0.1 mL/L.
- c. pH. For waters listed in Attachment B-4 (Table 3-1 from the Basin Plan), the pH water quality objectives in Attachment B-4 shall apply as effluent limitations. For waters not listed in Attachment B-4 and where pH objectives are not prescribed, the pH of the discharge shall be not less than 6.5 nor greater than 8.5.
- d. Total Dissolved Solids. For waters listed in Attachment B-4 (Table 3-1 from the Basin Plan), the total dissolved solids water quality objectives in Attachment B-4 shall apply as effluent limitations.

## **2. Final Effluent Limitations for Discharges to Ocean Waters**

- a. Total Residual Chlorine. (Applicable to any discharge of water that was chlorinated). The discharge shall not contain total residual chlorine in excess of 0.008 mg/L as a daily maximum.
- b. Settleable Solids. Effluent shall not contain any measurable settleable solids using a detection limit of 0.1 mL/L.
- c. The pH of the discharge shall be not less than 6.0 nor greater than 9.0 at all times.

## **3. Interim Effluent Limitations**

The General Permit does not include interim effluent limitations.

## **B. Land Discharge Specifications**

Land discharge is a means by which a discharger enrolled under this General Permit may reduce the volume and duration of discharge to surface waters. Such a discharge shall comply with the following land discharge specification:

- 1. Land discharges shall not cause the creation of pollution or nuisance conditions.

## **C. Reclamation Specifications**

Reclamation specifications are not applicable to low threat discharges.



#### **D. Other Requirements**

1. Oil or oily materials, chemicals, refuse, or other materials that may cause pollution shall not be stored or deposited in areas where they may be picked up by the low threat discharge and discharged to surface waters. Any spill of such materials shall be contained, removed and cleaned immediately.
2. Discharges shall be controlled at the lowest possible flow rate to minimize potential impacts on aquatic life and habitat and to reduce erosion and stream scouring. Discharge locations must be selected to avoid sensitive habitats. BMPs shall include adequate velocity dissipation devices, when necessary to prevent and minimize erosion, stream scouring, increases in turbidity, and any other potential damage to receiving waters.
3. Discharges of low threat wastewater shall not be located within 500 feet of the intake for a domestic drinking water supply. Discharges shall be conducted to avoid potential pollution to private and public water wells.

#### **VI. RECEIVING WATER LIMITATIONS**

Receiving water limitations are based on water quality objectives contained in the Basin Plan and Ocean Plan and are a required part of this General Permit. All of the Basin Plan and Ocean Plan water quality objectives have been incorporated into this General Permit as standard language for consistency with the Statewide NPDES template; however some of the specific requirements have no application to low threat discharges because these requirements address pollutants or characteristics that would not be allowed in a low threat discharge (e.g., VI.A.13, VI.A.17, VI.B.5.d). Discharges authorized by this General Permit shall not cause the following conditions in receiving waters.

##### **A. Surface Water Limitations – Inland Waters, Enclosed Bays, and Estuaries**

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. Compliance with receiving water limitations shall be measured at monitoring locations described in the MRP. Note: Table 3-1 of the Basin Plan is included in this Order as Table B-4.

1. Unless more stringent water quality objectives for dissolved oxygen are established for a specific receiving water by Table 3-1 of the Basin Plan (Attachment B-4), authorized discharges shall not cause the dissolved oxygen concentration of receiving waters to be depressed below 7.0 mg/l at any time nor below 9.0 mg/L during critical spawning and egg incubation periods. In the event that the receiving waters have background dissolved oxygen concentrations of less than these levels, discharges shall not depress dissolved oxygen concentrations below existing levels.

2. Unless more stringent water quality objectives for pH are established for a specific receiving water by Table 3-1 of the Basin Plan, authorized discharges shall not cause the pH of receiving waters to be depressed below 6.5 nor raised above 8.5. Within this range, authorized discharges shall not cause receiving water pH to change more than 0.5 pH units at any time.
3. Authorized discharges shall not cause or substantially contribute to exceedances of water quality objectives for specific waters of the North Coast Region that are established in Table 3-1 of the Basin Plan (Attachment B-4) for specific conductance, total dissolved solids, hardness and boron.
4. Authorized discharges shall not cause the turbidity of receiving waters to be increased more than 20 percent above naturally occurring background levels.
5. Authorized discharges shall not cause receiving waters to contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses of receiving waters.
6. Authorized discharges shall not cause receiving waters to contain floating materials, including, but not limited to, solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
7. Authorized discharges shall not cause receiving waters to contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
8. Authorized discharges shall not cause coloration of receiving waters that causes nuisance or adversely affects beneficial uses.
9. Authorized discharges shall not cause bottom deposits in receiving waters to the extent that such deposits cause nuisance or adversely affect beneficial uses.
10. Authorized discharges shall not cause or substantially contribute to concentrations of biostimulants in receiving waters that promote objectionable aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses of the receiving waters.
11. Authorized discharges shall not cause receiving waters to contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
12. Authorized discharges shall not cause alteration of natural temperature of receiving waters unless it can be demonstrated to the satisfaction of the Executive Officer that such alteration in temperature does not adversely affect beneficial uses. At no time

or place shall discharges cause temperature to increase more than 5° F above natural receiving water temperature.

13. Authorized discharges shall not cause an individual pesticide or combination of pesticides to be present in concentrations that adversely affect beneficial uses of receiving waters. Authorized discharges shall not cause bioaccumulation of pesticide, fungicide, wood treatment chemical, or other toxic pollutant concentrations found in bottom sediments or aquatic life to levels that are harmful to human health.

The authorized discharge shall not cause receiving waters to contain concentrations of pesticides in excess of the limiting concentrations set forth in Table 3-2 of the Basin Plan or in excess of more stringent Maximum Contaminant Levels (MCLs) established for these pollutants in title 22, Division 4, Chapter 15, Articles 4 and 5.5 of the California Code of Regulations.

14. Authorized discharges shall not cause the receiving waters to contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water that cause nuisance or that otherwise adversely affect beneficial uses.
15. Authorized discharges shall not cause a violation of any applicable water quality objectives for receiving waters adopted by the Regional Water Board or the State Board as required by the CWA and regulations adopted hereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA Section 303 or amendments thereto, the Regional Water Board will revise and modify this General Permit in accordance with the more stringent standards.
16. Authorized discharges shall not cause concentrations of chemical constituents to occur in excess of limits specified in Table 3-2 of the Basin Plan or in excess of more stringent Maximum Contaminant Levels (MCLs) established for these pollutants in title 22, Division 4, Chapter 15, Articles 4 and 5.5 of the California Code of Regulations.
17. Authorized discharges shall not cause radionuclides to be present in concentrations which are deleterious to human, plant, animal, or aquatic life nor which result in the accumulation of radionuclides in the food web to an extent which presents a hazard to human, plant, animal, or indigenous aquatic life.

Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of radionuclides in excess of the limits specified in California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64442 (Table 64442).

## **B. Surface Water Limitations – Ocean Waters**

Authorized discharges shall not cause violations of the following receiving water limitations established for the ocean waters of the North Coast Region.

### **1. Bacterial Characteristics**

#### **a. Body Contact Standards**

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone designated for water contact recreation use by the Regional Water Board, but including all kelp beds, the following bacteriological objectives shall be maintained throughout the water column.

30-Day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each receiving water monitoring location.

- i. Total coliform density shall not exceed 1,000 per 100 ml;
- ii. Fecal coliform density shall not exceed 200 per 100 mL; and
- iii. Enterococcus density shall not exceed 35 per 100 mL.

Single Sample maximum;

- i. Total coliform density shall not exceed 10,000 per 100 ml;
- ii. Fecal coliform density shall not exceed 400 per 100 mL; and
- iii. Enterococcus density shall not exceed 104 per 100 mL.
- iv. Total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform to total coliform ratio exceeds 0.1

#### **b. Shellfish Harvesting**

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the following bacteriological objectives shall be maintained throughout the water column:

- i. The median total coliform density shall not exceed 70 organisms per 100 mLs, and in not more than 10 percent of samples shall coliform density exceed 230 organisms per 100 mLs.

### **2. Physical Characteristics**

#### **a. Floating particulates and grease and oil shall not be visible.**

- b. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

- c. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
- d. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

### 3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally as a result of the discharge of oxygen demanding waste material.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- d. The concentration of substances set forth in Chapter IV, Table B of the Ocean Plan in marine sediments shall not be increased to levels that would degrade indigenous biota.
- e. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
- f. Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota.
- g. Discharges shall not cause exceedances of water quality objectives for ocean waters of the State established in Table B of the Ocean Plan.
- h. Discharge of radioactive waste shall not degrade marine life.

### 4. Biological Characteristics

- a. Marine communities, including vertebrate, invertebrate and plant species, shall not be degraded.
- b. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
- c. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

## 5. General Standards

- a. The discharge shall not cause a violation of any applicable water quality standard for the receiving waters adopted by the Regional Water Board or the State Water Board as required by the Clean Water Act and regulations adopted thereunder.
- b. The discharge shall be essentially free of:
  - i. Material that is floatable or will become floatable upon discharge.
  - ii. Settleable material or substances that may form sediments that will degrade benthic communities or other aquatic life.
  - iii. Substances that will accumulate to toxic levels in marine waters, sediments or biota.
  - iv. Substances that significantly decrease natural light to benthic communities and other marine life.
  - v. Material that results in aesthetically undesirable discoloration of the ocean surface.
- c. Waste effluent shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.
- d. Location of waste discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that:
  - i. Pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body contact sports.
  - ii. Natural water quality conditions are not altered in areas designated as being of special biological significance.
  - iii. Maximum protection is provided to the marine environment.
  - iv. The discharge does not adversely affect recreational beneficial uses such as surfing and beach walking.

## C. Groundwater Limitations

Receiving water limitations for groundwater are based on water quality objectives in the Basin Plan.

1. Low threat discharges shall not cause exceedances of applicable water quality objectives or create adverse impacts to beneficial uses of groundwater.
2. Low threat discharges shall not cause or substantially contribute to a statistically significant degradation of groundwater.

3. Low threat discharges shall not cause groundwater to contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

## **VII. PROVISIONS**

### **A. Standard Provisions**

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this General Permit and shall adhere to the following standard provisions applicable to General Permits from 40 CFR 122.28(b):
  1. The General Permit may be modified, revoked, and reissued, or terminated in accordance with applicable requirements of NPDES regulations at 40 CFR 124.
  2. The Executive Officer may require any discharger authorized by the General Permit to apply for and obtain an individual NPDES permit. Any interested person may petition the Executive Officer to take action under this paragraph. Cases where an individual NPDES permit may be required include the following:
    - i. The discharger is not in compliance with the terms of the general permit;
    - ii. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
    - iii. Effluent Limitations Guidelines are promulgated for the point sources covered by the General Permit;
    - iv. A water quality management plan applicable to the point sources covered by the General Permit is approved;
    - v. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the General Permit or either a temporary or permanent reduction or elimination of the authorized discharge is necessary; or
    - vi. The discharger is a significant contributor of pollutants to the receiving waters.
  - c. Any owner or operator authorized under the General permit may request to be excluded from coverage by applying for an individual permit in accordance with 40 CFR 122.28(b)(3)(iii).

- d. When an individual NPDES permit is issued to an owner or operator otherwise subject to the General Permit, the applicability of the General Permit to the discharger is automatically terminated on the effective date of the individual permit.

2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following Regional Water Board standard provisions:

1. Authorization to discharge under this Order may be terminated for reasons which include, but are not limited to, the following:
  - i. Violation of any term or condition contained in this Order;
  - ii. Obtaining authorization to discharge under this Order by misrepresentation or failure to fully disclose relevant information;
  - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
  - iv. A change in the characteristics of the wastewater which no longer meets the definition of low threat and therefore, is not eligible for coverage under this Order;
  - v. The discharge is endangering human health or the environment.
2. The USEPA Administrator may request the Regional Water Board Executive Officer to require any discharger authorized to discharge under this General Permit to subsequently apply for and obtain an individual NPDES Permit. The Executive Officer may require any discharger authorized to discharge waste under this General Permit to subsequently apply for and obtain an individual NPDES Permit. An interested person may petition the Executive Officer or the Regional Administrator to take action under this provision. The Regional Water Board may also review and revise this General Permit at any time upon application by any person, or on the Regional Water Board's own motion.
3. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under the federal CWA at Section 307(a) for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation for the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Discharger so notified.
4. The Executive Officer may modify or revoke authorization to discharge under this General Permit if it is determined that the Discharger is causing or significantly



contributing to adverse impacts to the water quality and/or beneficial uses of receiving waters. In the event that the Regional Water Board's interpretation of the narrative toxicity objective is modified or invalidated by the Regional Water Board, a court decision, or a State statute or regulation, this General Permit may be revised to be consistent with the decision, statute, or regulation.

5. In addition, the Regional Water Board may consider revising this General Permit to make it consistent with any Regional Water Board decisions arising from various petitions for re-hearing, and litigation concerning the State Implementation Plan, 303 (d) list, and TMDL Program.
6. **Availability.** A copy of this General Permit and the Executive Officer's authorization letter shall be maintained at the Discharger's facility or project site where the discharge occurs for reference by operating personnel. Key operating personnel shall be familiar with its content.
7. **Change in Discharge.** At least 30 days prior to an expected material change in the character, location, or volume of a discharge, the Discharger shall reapply for coverage under the General Permit by submitting a completed NOI to the Regional Water Board and submitting a new filing fee. A material change includes, but is not limited to, the following changes that could potentially cause different water quality or nuisance problems: identification of a pollutant that was not disclosed in the original NOI, an increase in the rate or volume of the discharge, or a change in the discharge location.
8. **Monitoring and Reporting.** The Regional Water Board or State Water Board may require the Discharger to establish and maintain records, make reports, install, use, and maintain monitoring equipment or methods (including, where appropriate, biological monitoring methods), sample effluent and receiving water as prescribed, and provide other information as may be reasonably required.

The Discharger shall file with the Regional Water Board technical reports on self monitoring work performed according to the detailed specifications contained in any monitoring and reporting program as directed by the Regional Water Board.

Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer. In the event a certified laboratory is not available to the Discharger, analyses performed by a non-certified laboratory will be accepted, provided:

9. A quality assurance/ quality control program is instituted by the laboratory, and a manual containing the steps followed in this program is kept in the

laboratory and made available for inspection by representatives of the Regional Water Board. The quality assurance/quality control program must conform to U.S. EPA or State Department of Public Health guidelines.

- ii. The laboratory will become certified within the shortest practicable time if the State certification program is resumed.

All Discharge Monitoring Reports shall be sent to:

California Regional Water Quality Control Board  
North Coast Region  
5550 Skylane Blvd., Suite A  
Santa Rosa, CA 95403

- i. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- j. The Discharger shall immediately cease any discharge authorized by this Order in the event there is a violation or threatened violation of this General Permit, or if the Executive Officer so orders. The Discharger must notify Regional Water Board staff orally, as soon as reasonably possible, with a written confirmation within a week, when a violation of this Order is known to exist. The Discharge may not be resumed until authorized in writing by the Executive Officer.
- k. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board orally<sup>8</sup> within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

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<sup>8</sup> Oral reporting means direct contact with a Regional Water Board staff person. The oral report may be given in person or by telephone. After business hours, oral contact must be made by calling the State Office of Emergency Services at (800)852-7550 or Regional Water Board spill officer at (707) 576-2220.

- I. Transfers. This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

## **B. Monitoring and Reporting Program (MRP) Requirements**

Authorized dischargers shall comply with the MRP requirements, and future revisions thereto, in Attachment E of this Order. In accordance with section IV.A of the MRP, when granting authorization to discharge under the General Permit, the Regional Water Board Executive Officer may modify the monitoring and reporting program for a specific discharger to reduce monitoring frequency and/or eliminate a monitoring parameter if it can be demonstrated that any reduction in monitoring requirements will not compromise water quality. In addition, the Executive Officer may stipulate conditions and requirements in addition to those established by the MRP for all authorized discharges, including monitoring and reporting requirements, for each specific discharge to assess compliance with requirements of the General Permit and/or to characterize the discharge and/or receiving water quality. Any deviations from the standard MRP that are proposed by the Executive Officer will be identified in the public notice placed on the Regional Water Board's website for each specific applicant.

## **C. Special Provisions**

### **1. Reopener Provisions**

- a. Standard Revisions. This Order may be reopened for modification, or revocation and reissuance in accordance with the provisions contained in 40 CFR section 122.62 which identifies the following conditions that may necessitate a permit modification:
  - i. If new or amended applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board may reopen this Order and make modifications in accordance with the new or amended standards.
  - ii. When new information, that was not available at the time of permit issuance, would have justified different permit conditions at the time of issuance.
- b. Total Chlorine Residual. If a statewide policy for total residual chlorine is adopted during the term of this Order, this Order may be reopened and modified to maintain consistency with the statewide policy.

## **2. Special Studies, Technical Reports and Additional Monitoring Requirements**

- a. **Pollution Prevention and Monitoring and Reporting Plan (PPMRP).** Water suppliers that propose to have multiple discharge points from a single project covered under a single enrollment may elect to prepare and implement a PPMRP in lieu of the specific Effluent Monitoring Requirements and Receiving Water Monitoring Requirements contained in sections IV and VIII of the Monitoring and Reporting Program (Attachment E). The PPMRP must be submitted with the Notice of Intent and is subject to approval by the Executive Officer. The PPMRP shall include, at a minimum, the elements identified in Attachment A-2 and shall be prepared and implemented in accordance with the General Monitoring Provisions, Other Monitoring Requirements, and Reporting Requirements contained in sections I, IX, and X, respectively, of the Monitoring and Reporting Program (Attachment E).

## **3. Best Management Practices (BMPs) and Pollution Prevention (PP)**

1. With its NOI, each discharger shall submit a BMP/PP Plan. Dischargers shall develop and implement a BMP/PP Plan to identify and implement site-specific BMPs and pollution prevention measures to reduce or prevent the discharge of wastes and pollutants to waters of the North Coast Region. The BMP/PP Plan shall include, at a minimum, the elements identified in Attachment A-1 and shall be submitted with the NOI. Only that volume of wastewater that remains after utilization of other reasonable disposal alternatives shall be allowed to discharge to the receiving water.
2. The BMP/PP Plan shall be consistent with the general guidance contained in USEPA's *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004) and with the California Stormwater Quality Association's *Stormwater Best Management Practices Handbook for Commercial and Industrial Properties* (June 2003) and shall include the following elements:
  - i. Characterization of Discharges. The BMP/PP Plan shall include a narrative assessment of all activities conducted at the site; potential pollutant sources associated with each activity; and the nature of the pollutants that could be discharged, including pollutants that could occur at the point of discharge due to stream bank erosion and stream scouring.
  - ii. Identification of Best Management Practices. The BMP/PP Plan shall include a narrative description of the specific BMPs to be implemented at the site to control the discharge of pollutants. The BMP/PP Plan shall also identify any necessary measures to mitigate any negative impacts of the BMPs. Dischargers shall consider:

- (a) Preventative BMPs - measures to reduce or eliminate the generation of pollutants and waste,
  - (b) Control BMPs - measures to control or manage pollutants and waste after they are generated and before they come into contact with receiving water,
  - (c) Treatment BMPs - measures to remove pollutants and waste from water prior to discharge (see section II.A of the fact Sheet for a discussion of wastewater treatment systems, which will not preclude coverage under the General Permit), and
  - (d) Response BMPs - measures to respond to leaks, spills, and other releases with containment, control, and cleanup measures to prevent or minimize the potential for the discharge of pollutants and to minimize the adverse effects of such discharges.
- iii. Site Map that includes site boundaries, structures, location of site runoff collection and conveyance systems and points of discharge, and location of BMPs and treatment systems.
- c. When low threat discharges will continue for more than one year, the Discharger shall conduct a compliance evaluation before the end of each year (including the first year) to determine the effectiveness of the BMP Program.
- d. The compliance evaluation shall include:
  - i. A review of all visual observation records, inspection records, and sampling and analysis results.
  - ii. A visual inspection of all potential pollutant sources for evidence of, or the potential for, the discharge of pollutants.
  - iii. A review and evaluation of all BMPs to determine whether the BMPs are adequate, properly implemented and maintained, and determination of what additional BMPs are necessary.
- e. Following the compliance evaluation, the BMP/PP Plan shall be revised, as appropriate, and submitted to the Regional Water Board with documentation of the results of the compliance evaluation. Revisions to the BMP/PP Plan shall be implemented within 90 days following completion of the compliance evaluation.

#### **4. Construction, Operation and Maintenance Specifications**

Treatment systems and BMPs shall be constructed, operated, and maintained in a manner that ensures compliance with all requirements of this General Permit.

#### **5. Special Provisions for Municipal Facilities (POTWs Only)**

This section of the standardized permit template is not applicable to discharges of low threat wastewaters.

#### **6. Other Special Provisions**

##### **a. Stormwater**

- i. Industrial Storm Water. If applicable, authorized dischargers shall seek coverage under and comply with the requirements of State Water Board Order No. 97-03-DWQ, NPDES General Permit No. CAS000001 – Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities (1997). If this Industrial General Storm Water Permit is reissued, authorized dischargers shall seek coverage under and comply with the requirements of the most recent version of the permit.
- ii. Construction Storm Water. If applicable, authorized dischargers shall seek coverage under and comply with the requirements of State Water Board Order No. 99-08-DWQ, NPDES General Permit No. CAS 000002 – Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity. If this Construction General Storm Water Permit is reissued, authorized dischargers shall seek coverage under and comply with the requirements of the most recent version of the permit.

##### **b. Mitigation Measures**

Dischargers enrolled under this General Permit are required to implement BMPs in accordance with a BMP/PP Plan submitted with each Dischargers' NOI. In order to ensure that BMPs do not cause adverse environmental impacts, each Discharger shall implement the following mitigation measures, as applicable:

- i. Discharge volumes and flow rates and pollutants shall be minimized to reduce impacts on beneficial uses of the receiving water.
- ii. BMPs shall be implemented for periods of time corresponding with the period of discharge. BMPs shall be removed once a discharge is completed.

- iii. BMPs shall be sized properly for the discharge that is enrolled under this General Permit.
- iv. BMPs shall be monitored to ensure that they are working correctly.
- v. BMPs that could result in stagnant water shall be inspected regularly to ensure that the treatment devices are not clogged, pooling water, or causing odors or other nuisance conditions such as vectors. If deficiencies are identified, the Discharger shall contact the appropriate Regional Water Board staff person and appropriate corrective measures shall be implemented immediately to correct any deficiencies.
- vi. BMPs shall be carefully sited and/or camouflaged so that they are not unsightly.
- vii. During the installation of any BMPs that require earth movement, moisture shall be used to reduce the transfer of particulates and dust into the air.
- viii. Prior to installing BMPs that involve substantial earth movement, the Discharger shall consult with the appropriate federal, state and local agencies, including, but not limited to the county the project is located in, California Department of Fish and Game, U.S. Fish and Wildlife Service, and National Marine Fisheries Service, and implement any mitigation measures identified by the agencies to avoid impacts to rare, threatened, or endangered species; wildlife migration; and/or use of native wildlife nursery areas. If appropriate, to avoid conflicts with any of these plans, the timing and/or location of the BMPs must be adjusted to reduce any potential conflict. If such adjustments cannot be made, the BMP would need to be changed to avoid any adverse impacts.
- ix. BMPs shall be consistent with the requirements of any existing Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. If appropriate, to avoid conflicts with any of these plans, the timing and/or location of the BMPs must be adjusted to reduce any potential conflict. If such adjustments cannot be made, the BMP would need to be changed to avoid any adverse impacts.
- x. BMPs that require substantial earth movement shall not be installed in riparian or federally protected wetland areas.
- xi. If BMP installation involves excavation activities, a cultural resources investigation shall be conducted before any substantial disturbance of land that has not been disturbed previously. The cultural resources investigation

will include, at a minimum, a records search for previously identified cultural resources and previously conducted cultural resources investigations of the project parcel and vicinity. This record search will include, at a minimum, contacting the appropriate information center of the California Historical Resources Information System, operated under the auspices of the California Office of Historic Preservation. In coordination with the information center or a qualified archaeologist, a determination shall be made regarding whether previously identified cultural resources will be affected by the proposed project and if previously conducted investigations were performed to satisfy the requirements of CEQA. If not, a cultural resources survey shall be conducted. The purpose of this investigation will be to identify resources before they are affected by a proposed project and avoid the impact. If the impact is unavoidable, mitigation will be determined on a case-by-case basis, as warranted.

- xii. During construction of any structural BMP that requires earth movement, the Discharger shall minimize off-site sediment runoff or deposition under general construction storm water waste discharge requirements and/or through the construction program of the applicable municipal separate storm water system WDR. Both of these permits require that erosion impacts minimize or eliminate impacts on the receiving water.
- xiii. Hazardous materials stored and used at the site of a low threat discharge shall be properly stored and handled to ensure that hazardous materials are not discharged.
- xiv. BMPs shall be implemented in a manner that does not cause the alteration of the existing drainage pattern.
- xv. BMPs that involve discharges to a local sanitary sewer system shall obtain proper permission and permitting from the owner/operator of the sanitary sewer system.
- xvi. BMPs that involve a storm drain system to be retrofitted or reconfigured shall obtain permission and any necessary permitting from the municipality that owns the storm water system.
- xvii. Solid or liquid wastes generated during implementation of a BMP shall be properly disposed of.
- xviii. BMPs that involve dredge and fill shall not be constructed until permit coverage has been received under any other applicable permit (e.g., CWA 401 and 404 permits, WDRs or waiver of WDRs).



## **7. Compliance Schedules**

This section of the standardized permit template is not applicable to discharges of low threat wastewaters.

## **VII. COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

### **A. General.**

Compliance with effluent limitations shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentrations pollutants in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

### **B. Multiple Sample Data.**

When determining compliance with an AMEL, AWEL, or MDEL and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

### **C. Average Monthly Effluent Limitation (AMEL).**

If the average or when applicable, the median determined by subsection B above for multiple sample data of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the

Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**D. Average Weekly Effluent Limitation (AWEL).**

If the average or when applicable, the median determined by subsection B above for multiple sample data of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**E. Maximum Daily Effluent Limitation (MDEL).**

If a daily discharge or when applicable, the median determined by subsection B above for multiple sample data of a daily discharge exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

**F. Instantaneous Minimum Effluent Limitation.**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

**G. Instantaneous Maximum Effluent Limitation.**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

## ATTACHMENT A – NOTICE OF INTENT

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD NORTH COAST REGION

#### NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF  
ORDER NO. R1-2009-0045  
GENERAL PERMIT  
FOR  
LOW THREAT DISCHARGES TO SURFACE WATERS  
IN THE NORTH COAST REGION

#### A. OWNER/OPERATOR

|                  |        |  |        |
|------------------|--------|--|--------|
| Name:            |        | Owner/Operator Type (Check one):<br><input type="checkbox"/> City <input type="checkbox"/> Federal<br><input type="checkbox"/> County <input type="checkbox"/> Special District<br><input type="checkbox"/> State <input type="checkbox"/> Private |        |
| Mailing Address: |        |  |        |
| City:            | State: | ZIP:   | Phone: |
| Contact Person:  |        | <input type="checkbox"/> Owner <input type="checkbox"/> Owner/Operator<br><input type="checkbox"/> Operator <input type="checkbox"/> Contractor  |        |
| Email:           |        | Fax:   |        |

#### B. FACILITY/SITE INFORMATION

|                 |        |                 |        |
|-----------------|--------|-----------------|--------|
| Facility Name:  |        | County:         |        |
| Street Address: |        | Contact Person: |        |
| City:           | State: | ZIP:            | Phone: |
| Email:          |        | Fax:            |        |

#### C. BILLING ADDRESS

|  |                  |        |      |        |
|--|------------------|--------|------|--------|
| Send to:<br><input type="checkbox"/> Owner/Operator<br><input type="checkbox"/> Facility<br><input type="checkbox"/> Other<br>(Enter information at right) | Name:            |        |      |        |
|  | Mailing Address: |        |      |        |
|  | City:            | State: | ZIP: | Phone: |

#### D. PROFESSIONAL ENGINEER

|  |        |                  |        |
|--|--------|------------------|--------|
| If a professional engineer has evaluated the existing or proposed discharge for compliance with this General Permit, identify. |        |                  |        |
| Name:  |        |                  |        |
| Mailing Address:   |        |                  |        |
| City:  | State: | ZIP:             | Phone: |
| Signature:   |        | Certificate No.: | Date:  |

#### E. DISCHARGE INFORMATION

|  |   |  |             |
|--|---|--|-------------|
| <b>Identify type of discharge</b>  |   |  |             |
| <input type="checkbox"/> Well Development Water  | <input type="checkbox"/> Pipeline/Tank Pressure Testing       | <input type="checkbox"/> Subterranean seepage dewatering |             |
| <input type="checkbox"/> Construction Dewatering   | <input type="checkbox"/> Pipeline/Tank Flushing or Dewatering | <input type="checkbox"/> Geothermal well testing         |             |
| <input type="checkbox"/> Pump/Well Testing   | <input type="checkbox"/> Condensate                           | <input type="checkbox"/> Other                           |             |
| <input type="checkbox"/> Water Supply System   | <input type="checkbox"/> Dredge spoils dewatering             | _____  |             |
| Vessels, pipelines, structures, and processes with which the water has contact prior to discharge shall be fully described and quantified to allow characterization regarding possible additives or pollutants, including chemical (e.g., chlorine or petroleum, trihalomethanes, naturally occurring metals), thermal, or physical (e.g., suspended or settleable solids) pollutants. |   |  |             |
| The points of discharge and the up and down stream receiving waters shall be described to allow an understanding of potential physical impacts such as bank erosion, stream scouring, impacts on aquatic life.   |   |  |             |
| <b>Field Parameters of Proposed Discharge (below):</b>   |   | <b>Date of Field Parameter Test:</b> _____               |             |
| Temperature<br>_____   | Dissolved Oxygen<br>_____                                     | Specific Conductance<br>_____                            | pH<br>_____ |
| Proposed Start Date:   |   | Stop Date (estimate):                                    |             |
| Discharge Rate (MGD):  |   | Estimated Volume:  |             |
| Will the discharge rate exceed one-percent of the receiving water flow? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>If yes, submit written information to document that the discharge meets the eligibility criteria identified in section II.A.3 of the General Permit.   |   |  |             |
| <input type="checkbox"/> Continuous  | <input type="checkbox"/> Intermittent                         | <input type="checkbox"/> Seasonal                        |             |

## F. IDENTIFICATION OF KNOWN GROUNDWATER CONTAMINATION SITES (Groundwater Projects)

If the proposed discharge involves the discharge of groundwater, the applicant must contact Regional Water Board Cleanups Unit staff to identify whether there are known groundwater contamination sites within ½ mile of the proposed project.

- ☐ Not applicable. The proposed project does not involve the discharge of groundwater.
- ☐ Applicable. The proposed project does involve the discharge of groundwater. If this box is checked, include (1) an attachment that identifies groundwater contamination site name(s), address(es), known pollutants, and contact name(s) at Regional Water Board or County and (2) demonstration that the groundwater proposed for discharge is unaffected by the contaminated site and pumping activities will not have the inadvertent effect of capturing groundwater pollutants

## G. POLLUTANTS/PARAMETERS OF CONCERN/WASTE WATER SAMPLING

- ☐ Provide a written description characterizing the discharge and potential pollutants of concern. Attach additional pages if necessary.

Are additives in the discharge? ☐ Yes (describe and quantify) ☐ No

- ☐ If yes, provide a list of all chemicals (including Material Safety Data Sheets) added to the water to be discharged and the concentration of such additives in the discharged effluent.

- ☐ Discharges to inland surface waters, enclosed bays and estuaries must submit:

- (1) The analytical results of a representative sample of the proposed effluent for pollutants listed in Attachment B, Tables B-1 and B-2 of this General Permit.<sup>1</sup>
- (2) the analytical results of a representative sample of the proposed effluent for BOD, total suspended solids, settleable solids, total chlorine, pH, temperature, dissolved oxygen, specific conductance, hardness, turbidity, nitrate, and total dissolved solids;
- (3) the analytical results of the upstream receiving water for pH, temperature, dissolved oxygen, specific conductance, hardness, turbidity, and total dissolved solids.

- ☐ Discharges to ocean waters must submit the analytical results of a representative sample of the proposed effluent for:

- (1) oil and grease, total suspended solids, settleable solids, turbidity and pH.
- (2) The pollutants in Attachment B, Table B-5 of this General Permit.

- ☐ Provide the results of analysis of the existing or proposed effluent for pollutants causing impairment under the current CWA 303(d) list if proposing to discharge to an impaired surface water. The list of impaired surface waters can be found under the CWA Section 303(d) list at the web site:

[http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/303d\\_lists2006\\_epa.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml)

- ☐ Provide the analytical report from the laboratory.

<sup>1</sup> Dischargers of low volume discharges seeking an exception to the sampling requirements contained in Attachment B must describe why specific pollutants or categories of pollutants are not expected to be in the discharge and submit justification that the existing or proposed discharge will have no significant adverse impact on water quality.

## H. EVALUATION OF DISPOSAL/RECLAMATION OPTIONS

Provide an evaluation of disposal options or means for eliminating the need for discharge and justification for selecting a surface water disposal alternative. If no alternative disposal options are viable, explain why (attach additional sheet as necessary).

If alternative disposal options are feasible, contact the Regional Water Board. This General Permit does not apply if there is no discharge to surface waters.

|   |                              |                             |
|---|------------------------------|-----------------------------|
| Is discharge to the local municipal wastewater treatment plant a viable option? If no, include a written statement that describes why discharge to a sanitary sewer is not viable, and, a written statement from the sewer authority, if the sewer authority cannot accept the discharge. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Is land disposal or reclamation a viable option?  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Is wastewater reuse (e.g., dust control, etc.) a viable option?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Is it possible to eliminate or reduce the discharge volume through some other means such as conservation or engineering measures? Describe additional measures evaluated.   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

## I. DISCHARGE LOCATION<sup>2</sup> AND DISCHARGE POINT DESCRIPTION

|  |
|--|
| Street (including address, if any)   |
| City/County  |
| Nearest Cross Street(s)  |
| Township/Range/Section T_____, R_____, Section_____, MDB&M   |
| Attach a map of at least 1:24000 (1" = 2000') showing the discharge site (e.g., USGS 7.5' topographic map). The map should show the treatment system, flow path, discharge point and surface waters. Wells and residences within 1,500 feet shall be identified. |

## J. RECEIVING WATER INFORMATION

|  |               |          |
|--|---------------|----------|
| Does your project discharge to :   |               |          |
| <input type="checkbox"/> Storm drain system – Enter owner's name: _____                            |               |          |
| <input type="checkbox"/> Directly to waters of the State or U.S. (e.g., creek, river, lake, ocean) |               |          |
| Name of receiving water body:  |               |          |
| Fresh Water, Estuarine, or Marine:   | Tributary to: |          |
| Estimated Receiving water Flow (mgd or cfs)  | Minimum:      | Average: |

<sup>2</sup> Water suppliers that have more than one existing or proposed discharge point are not required to complete this section. Dischargers other than water suppliers with more than one existing or proposed discharge point should provide the information in a supplementary letter.

|   |                              |                             |
|---|------------------------------|-----------------------------|
| Is Receiving Water Flow Continuous or Intermittent (Describe):  |                              |                             |
| Are receiving water conditions at time of discharge anticipated to change from what is described in this NOI?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, explain:  |                              |                             |
| Potable Water intakes within 500 feet:  |                              |                             |
| Other Nearby Point Source Discharges (Describe):  |                              |                             |
| Bank Conditions (e.g., presence or absence of vegetation and vegetation type, bank stability):  |                              |                             |
| Instream conditions (e.g., substrate type, presence or absence of pools, etc):  |                              |                             |
| Describe visual evidence or knowledge of aquatic species present:   |                              |                             |
| Physical Water Quality Characteristics of receiving water -<br>Date of evaluation _____ pH: _____ Temperature: _____ Turbidity: _____<br>Dissolved Oxygen: _____ Specific Conductivity: _____ |                              |                             |

## K. TREATMENT SYSTEM

|  |                               |   |  |   |
|--|-------------------------------|---|--|---|
| Identify type of treatment system:   | <input type="checkbox"/> None | <input type="checkbox"/> Dechlorination | <input type="checkbox"/> Settling/Filtration | <input type="checkbox"/> Other -Identify: |
| <input type="checkbox"/> If none, describe why a treatment system is not necessary:  |                               |   |  |   |
| <input type="checkbox"/> Provide narrative and schematic descriptions of the existing or proposed treatment system and process and describe pollutant removal mechanisms and estimated effluent concentrations. Include engineering blueprints signed by a Registered Engineer or Geologist, if applicable. If there is no treatment system, describe why treatment is not necessary. Provide a residual waste disposal plan if residual wastes will be generated. |                               |   |  |   |
| Signature:   | Certificate No.               |   |  | Date:                                     |

## **L. MANAGEMENT/POLLUTION PREVENTION PLANS**

- |  |
|--|
| <input type="checkbox"/> All dischargers shall submit a Best Management Practices Plan that addresses the appropriate elements identified in Attachment A-1.   |
| <input type="checkbox"/> Dischargers may submit a Pollution Prevention and Monitoring and Reporting Plan (PPMRP) which contains all of the elements identified in Attachment A-2. Upon approval by the Executive Officer, the PPMRP may be substituted for the standard MRP that is attached to the Low Threat Permit. |

## **M. MAPS AND PHOTOGRAPHS**

- |  |
|--|
| <input type="checkbox"/> Attach a map(s) that shows the topography of the area extending at least one mile beyond site boundaries, site boundaries, identification of the receiving water and proposed discharge points, and the route of the discharge to the receiving water. The map should also identify the location of any known groundwater cleanup sites within ½ mile of the proposed project site <sup>3</sup> , if the project involves the discharge of groundwater. |
| <input type="checkbox"/> Attach a site drawing that identifies locations of BMPs and treatment systems and site runoff collection and conveyance systems (e.g., storm drains, ditches, etc) through which the proposed discharge would travel  |
| <input type="checkbox"/> Attach representative photographs of the discharge point and the receiving water in the vicinity of the discharge point to document pre-project conditions.   |

## **N. FEE REQUIREMENTS**

- |  |
|--|
| <input type="checkbox"/> Provide the applicable fees. Information concerning the applicable fees can be found at <a href="http://www.waterboards.ca.gov/resources/fees">http://www.waterboards.ca.gov/resources/fees</a> <sup>4</sup> and should be verified with the appropriate Regional Water Board staff person. Checks must be made payable to the State Water Resources Control Board. |
|--|

## **O. ABILITY TO COMPLY**

|   |
|---|
| Do you believe the discharge may have acute or chronic toxicity, chemical or organic constituents, sediment, total suspended solids, BOD, bacteria, pesticides, oil and grease, radioactivity, salinity or temperature that may violate receiving water objectives of this permit or adversely impact beneficial uses of the receiving water? |
|---|

☐ Yes      ☐ No

|  |
|--|
| If your answer is no, please provide an explanation of ability to comply considering the receiving water quality, discharge water quality, and the pollutant loading to the receiving water. |
|--|

<sup>3</sup> Known groundwater cleanup sites must be identified by contacting Regional Water Board Cleanups Staff.

<sup>4</sup> The filing fee for this low threat permit is identified in the California Code of Regulations, Chapter 23, Division 3, Chapter 9, Article 1 and consists of the base fee identified in section 2200(b)(8) and the ambient water quality monitoring surcharge (21 percent of the base fee) identified in the second paragraph of section 2200



If your answer is yes, you must contact a Professional Engineer. A specific individual permit may be required from the Regional Water Board rather than this General Permit.

**Professional Engineer:**

Name:

Mailing Address:

City:

State:

Zip:

Phone:

**P. SIGNATURE**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice of Intent and all attachments, and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the Notice of Intent, I believe that the information is true, accurate and complete to the best of my knowledge. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment. By signing this NOI, I also agree to comply with the monitoring and reporting program and stop the discharge if there is any violation, or threatened violation, of the General Permit.

Signature of Contractor/Operator:

Signature of Property Owner:

Print or type name:

Print or type name:

Title:

Date:

Title:

Date:

**For Agency Use Only.**

**AGENCY CONSULTATIONS/ NOTIFICATIONS**

| AGENCY   | CONTACT / PHONE<br># | MITIGATIONS REQUIRED OR CONCERNS |
|--|----------------------|----------------------------------|
| <input type="checkbox"/> LOCAL FLOOD CONTROL                       |                      |                                  |
| <input type="checkbox"/> DEPT. OF FISH AND GAME                    |                      |                                  |
| <input type="checkbox"/> U.S. FISH AND WILDLIFE<br>SERVICE         |                      |                                  |
| <input type="checkbox"/> MUNICIPAL STORM WATER<br>AGENCY/PERMITTEE |                      |                                  |
| <input type="checkbox"/>   |                      |                                  |
| <input type="checkbox"/>   |                      |                                  |

## **Attachment A-1.**

### **Best Management Practices/Pollution Prevention Plan**

All dischargers shall submit a Best Management Practices/Pollution Prevention (BMP/PP) Plan with the Notice of Intent (NOI). In its determination of suitability for authorization/coverage under the General Permit, the Regional Water Board will assess the BMP/PP Plan for its consideration of site-specific conditions and its effectiveness at pollution prevention, control, and treatment, as well as its effectiveness at preventing erosion, stream scouring, nuisance conditions, and other potential adverse impacts to the receiving waters. The BMP/PP Plan must include sufficient detail to allow the Regional Water Board to assess whether or not all reasonable measures will be implemented to ensure that the discharge poses a low threat to water quality.

The purpose of the BMP/PP Plan is to evaluate potential sources of pollutants from the discharge and at the project site and to identify controls that will be implemented to effectively prevent pollutant discharges to surface and ground waters. The BMP/PP Plan shall include the following elements, as applicable:

1. Characterization of Discharges. The BMP/PP Plan shall include a narrative assessment of all activities conducted at the site; potential pollutant sources associated with each activity; and the nature of the pollutants that could be discharged, including pollutants that could occur at the point of discharge due to stream bank erosion and stream scouring.
2. Identification of Best Management Practices. The BMP/PP Plan shall include a narrative description of the specific BMPs to be implemented at the site to control the discharge of pollutants and minimize impacts to water quality. The BMP/PP Plan shall also identify applicable mitigation measures from section VII.C.6.b of the General Permit to ensure that the BMPs do not cause environmental impacts. Dischargers shall consider:
  - a. Preventative BMPs - measures to reduce or eliminate the generation of pollutants and waste and undesirable nuisance conditions. The discharger shall include measures to prevent or reduce the generation of pollutants and minimize the volume, rate of discharge and duration of discharge from the proposed discharge source and to prevent the discharge of other pollutants associated with any construction activity at the site associated with the proposed discharge.
  - b. The Discharger shall demonstrate that the discharge will be conducted in a manner that will prevent the creation of nuisance conditions, including, but not limited to creation of mosquito breeding habitat, flooding, nuisance algae conditions, odors, etc. For proposed discharges to dry stream beds the demonstration shall include a plan to ensure that water soaks into the ground in a short period of time to preclude the creation of mosquito breeding habitat.

- c. Control BMPs - measures to control or manage pollutants and waste after they are generated and before they come into contact with receiving water. The Plan shall include, if necessary, measures to retain soil and sediment on the site and to permanently stabilize any disturbed soils.
  - d. Treatment BMPs - measures to remove pollutants and waste from water prior to discharge (see section II. A of the Fact Sheet for a discussion of wastewater treatment systems, which will not preclude coverage under the General Permit), and
  - e. Response BMPs - measures to respond to leaks, spills, and other releases with containment, control, and cleanup measures to prevent or minimize the potential for the discharge of pollutants and to minimize the adverse effects of such discharges.
3. Site Map and drawing as specified in Section M of NOI.

The BMP/PP Plan shall be consistent with the general guidance contained in USEPA's *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004) and with the California Stormwater Quality Association's *Stormwater Best Management Practices Handbook for Commercial and Industrial Properties* (June 2003).

#### **Low Threat Discharge Control**

Indicate in the BMP/PP Plan what methods will be used to treat the discharge and prevent pollutants from impacting water quality and the environment. Options may include, but are not limited to:

1. Dechlorination of potable water or other water sources that have been chlorinated;
2. BMPs to remove pollutants from first flush water (e.g., settling for sediment, alternate disposal method for first flush water that may have residual chlorine or VOCs from drilling, welding debris, etc)
3. Ponds, trenches or basins for settling solids or cooling;
4. Vegetated filter strips or swales for removal of pollutants and/or to slow water velocity to prevent erosion);
5. Physical filter for removal of solids, dissolved solids, etc (e.g., sand filter, dirt bag, etc.);
6. Stabilized conveyance systems;
7. Energy dissipation (structures designed to prevent erosion and slow water velocity associated with conveyance systems);
8. Diverting flows around disturbed areas or other pollutant sources using stabilized conveyances;

9. Flow controls to minimize discharge rate and to prevent erosion and flooding;
10. Timing of discharge to eliminate or minimize impacts to receiving waters.

**Sediment Control and Erosion Prevention**

Indicate in the BMP/PP Plan the sediment controls that will be used to stabilize the site, as needed, to ensure that sediment is not discharged. Options may include, but are not limited to:

1. Filter barriers:
  - Fiber rolls/logs
  - Silt fence
  - Straw bales
  - Gravel inlet filters
2. Retention structures:
  - Sediment traps
  - Settling basins
3. Stabilized access points/good housekeeping:
  - Crushed rock
  - Mulch
  - Frequent sweeping

## **ATTACHMENT A-2.**

### **POLLUTION PREVENTION AND MONITORING AND REPORTING PLAN**

Water suppliers that have or propose to have numerous discharge points within the same receiving water covered by this General Permit may develop a Pollution Prevention and Monitoring and Reporting Plan (PPMRP) to implement in lieu of the Monitoring and Reporting Program in Attachment E of the General Permit. The PPMRP, if elected, shall be submitted with the Notice of Intent. The following requirements must be included in the PPMRP:

#### **I. POLLUTION PREVENTION PLAN**

- A.** Provide a general description of the distribution system and potential discharge locations. Identify pollutant types, flow rate ranges, and receiving waters.
- B.** Identify the treatment systems and best management practices that will be implemented to ensure protection of water quality, including but not limited to spill contingency plans, operation and maintenance procedures, inspections, equipment, supplies, training, erosion control, etc.

#### **II. MONITORING AND REPORTING PROGRAM**

- A.** Develop a representative sampling and analysis program. The sampling and analysis program shall describe proposed effluent and receiving water sampling locations, monitoring parameters and sampling methods, and frequency of monitoring. Dischargers are not required to sample all discharges if reasonable assurance is provided that the discharges will comply with requirements. Provide rationale for the sampling and analysis program. Inspection plans and visual observations for erosion, discoloration, stream bottom deposits, etc. must be included and must include the elements in section VIII.2 and VIII.3 of the Monitoring and Reporting Program (Attachment E).
- B.** The sampling and analysis program must be developed and implemented in accordance with the General Monitoring Provisions, and Reporting Requirements contained in sections I, and X, respectively, of the Monitoring and Reporting Program (Attachment E).

## ATTACHMENT B – WATER QUALITY OBJECTIVES FOR NORTH COAST REGION

### I. Proposed Discharges to Inland Surface Waters, Enclosed Bays and Estuaries.

Dischargers seeking authorization to discharge to inland surface waters, enclosed bays and estuaries under this General Permit shall sample and analyze the effluent for the constituents contained in Tables B-1, B-2, and B-3. The results of the analyses shall be compared to the corresponding screening level and shall be submitted as part of the Notice of Intent.

**Table B-1. Screening Levels for Priority Pollutants for Discharges to Inland Surface Waters, Enclosed Bays and Estuaries**

| Priority Pollutant <sup>1</sup> | Units | Minimum ML <sup>1</sup> | Most Stringent CTR Objective/Criterion      | Applicable CTR Objective/Criteria |                      |                    |
|---------------------------------|-------|-------------------------|---|-----------------------------------|----------------------|--------------------|
|                                 |       |                         |   | Human Health                      | Chronic Aquatic Life | Acute Aquatic Life |
| Antimony, Total Recoverable     | µg/L  | 5.0                     | 6   | 6                                 | --                   | --                 |
| Arsenic, Total Recoverable      | µg/L  | 2.0                     | 10  | 10                                | 150                  | 340                |
| Beryllium, Total Recoverable    | µg/L  | 1.0                     | 4   | 4                                 | --                   | --                 |
| Cadmium, Total Recoverable      | µg/L  | 1.5                     | See Table B-2 for hardness-based objectives |                                   |                      |                    |
| Chromium (VI)                   | µg/L  | 10                      | 11  | 100                               | 11                   | 16                 |
| Copper, Total Recoverable       | µg/L  | 2.0                     | See Table B-2 for hardness-based objectives |                                   |                      |                    |
| Lead, Total Recoverable         | µg/L  | 0.5                     | See Table B-2 for hardness-based objectives |                                   |                      |                    |
| Mercury, Total Recoverable      | µg/L  | 0.01                    | 0.05  | 0.05                              | 0.77                 | 1.4                |
| Nickel, Total Recoverable       | µg/L  | 5.0                     | See Table B-2 for hardness-based objectives |                                   |                      |                    |
| Selenium, Total Recoverable     | µg/L  | 1.0                     | 5.0   | 20                                | 5.0                  | 20                 |
| Silver, Total Recoverable       | µg/L  | 0.1                     | See Table B-2 for hardness-based objectives |                                   |                      |                    |
| Thallium, Total Recoverable     | µg/L  | 1.0                     | 1.7   | 1.7                               | 40                   | 1,400              |
| Zinc, Total Recoverable         | µg/L  | 10                      | See Table B-2 for hardness-based objectives |                                   |                      |                    |
| Cyanide, Total (as CN)          | µg/L  | 3.0                     | 5.2   | 150                               | 5.2                  | 22                 |
| Asbestos                        | MFL   | 1.5                     | 7   | 7                                 | --                   | --                 |
| 2,3,7,8-TCDD (Dioxin)           | µg/L  | 1.3 x10 <sup>-8</sup>   | 1.3E-08                                     | 1.3E-08                           | 0.00001              | 0.01               |
| Acrolein                        | µg/L  | 2.0                     | 320   | 320                               | --                   | --                 |
| Acrylonitrile                   | µg/L  | 2.0                     | 0.059                                       | 0.059                             | --                   | 7,550              |
| Benzene                         | µg/L  | 0.5                     | 1   | 1                                 | --                   | --                 |
| Bromoform                       | µg/L  | 0.5                     | 4.3   | 4.3                               | --                   | --                 |
| Carbon Tetrachloride            | µg/L  | 0.5                     | 0.25  | 0.25                              | --                   | --                 |
| Chlorobenzene                   | µg/L  | 0.5                     | 70  | 70                                | --                   | --                 |
| Chlorodibromomethane            | µg/L  | 0.5                     | 0.401                                       | 0.401                             | --                   | --                 |

<sup>1</sup> ML = Minimum Levels are established in Attachment 4 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) and are based on the analytical method used. The ML is the concentration in a sample that is equivalent to the concentration in the lowest calibration standard analyzed for a specific analytical procedure, assuming that all method specified sample weights, volumes, and processing steps have been followed. **The Reporting Level for each pollutant shall be less than or equal to the ML described in this table.**

| Priority Pollutant <sup>1</sup> | Units | Minimum<br>ML <sup>1</sup> | Most Stringent<br>CTR<br>Objective/Criterion | Applicable CTR Objective/Criteria |                            |                          |
|---------------------------------|-------|----------------------------|--|-----------------------------------|----------------------------|--------------------------|
|                                 |       |                            |  | Human<br>Health                   | Chronic<br>Aquatic<br>Life | Acute<br>Aquatic<br>Life |
| Chloroethane                    | µg/L  | 0.5                        | --   | --                                | --                         | --                       |
| 2-Chloroethylvinyl Ether        | µg/L  | 1.0                        | --   | --                                | --                         | --                       |
| Chloroform                      | µg/L  | 0.5                        | 80   | 80                                | 1,240                      | --                       |
| Dichlorobromomethane            | µg/L  | 0.5                        | 0.56   | 0.56                              | --                         | --                       |
| 1,1-Dichloroethane              | µg/L  | 0.5                        | 5  | 5                                 | --                         | --                       |
| 1,2-Dichloroethane              | µg/L  | 0.5                        | 0.38   | 0.38                              | 20,000                     | --                       |
| 1,1-Dichloroethylene            | µg/L  | 0.5                        | 0.057  | 0.057                             | --                         | --                       |
| 1,2-Dichloropropane             | µg/L  | 0.5                        | 0.52   | 0.52                              | 5,700                      | --                       |
| 1,3-Dichloropropylene           | µg/L  | 0.5                        | 0.5  | 0.5                               | 244                        | 6,060                    |
| Ethylbenzene                    | µg/L  | 0.5                        | 300  | 300                               | --                         | --                       |
| Methyl Bromide                  | µg/L  | 1.0                        | 48   | 48                                | --                         | 11,000                   |
| Methyl Chloride                 | µg/L  | 0.5                        | --   | --                                | --                         | --                       |
| Methylene Chloride              | µg/L  | 0.5                        | 4.7  | 4.7                               | --                         | --                       |
| 1,1,2,2-Tetrachloroethane       | µg/L  | 0.5                        | 0.17   | 0.17                              | 2,400                      | --                       |
| Tetrachloroethylene             | µg/L  | 0.5                        | 0.8  | 0.8                               | 840                        | --                       |
| Toluene                         | µg/L  | 0.5                        | 150  | 150                               | --                         | --                       |
| 1,2-Trans-Dichloroethylene      | µg/L  | 0.5                        | 10   | 10                                | --                         | --                       |
| 1,1,1-Trichloroethane           | µg/L  | 0.5                        | 200  | 200                               | --                         | 18,000                   |
| 1,1,2-Trichloroethane           | µg/L  | 0.5                        | 0.60   | 0.60                              | 9,400                      | --                       |
| Trichloroethylene               | µg/L  | 0.5                        | 2.7  | 2.7                               | --                         | 45,000                   |
| Vinyl Chloride                  | µg/L  | 0.5                        | 0.5  | 0.5                               | --                         | --                       |
| 2-Chlorophenol                  | µg/L  | 2.0                        | 120  | 120                               | --                         | --                       |
| 2,4-Dichlorophenol              | µg/L  | 1.0                        | 93   | 93                                | --                         | --                       |
| 2,4-Dimethylphenol              | µg/L  | 1.0                        | 540  | 540                               | --                         | --                       |
| 2-Methyl-4,6-Dinitrophenol      | µg/L  | 5.0                        | 13.4   | 13.4                              | --                         | 230                      |
| 2,4-Dinitrophenol               | µg/L  | 5.0                        | 70   | 70                                | --                         | 230                      |
| 2-Nitrophenol                   | µg/L  | 10                         | --   | --                                | --                         | --                       |
| 4-Nitrophenol                   | µg/L  | 5.0                        | --   | --                                | --                         | --                       |
| 3-Methyl-4-Chlorophenol         | µg/L  | 1.0                        | --   | --                                | --                         | --                       |
| Pentachlorophenol               | µg/L  | 1.0                        | 0.28   | 0.28                              | 23                         | 30                       |
| Phenol                          | µg/L  | 1.0                        | 21,000                                       | 21,000                            | --                         | --                       |
| 2,4,6-Trichlorophenol           | µg/L  | 10                         | 2.1  | 2.1                               | --                         | --                       |
| Acenaphthene                    | µg/L  | 0.5                        | 1,200  | 1,200                             | --                         | --                       |
| Acenaphthylene                  | µg/L  | 0.2                        | --   | --                                | --                         | --                       |
| Anthracene                      | µg/L  | 2.0                        | 9,600  | 9,600                             | --                         | --                       |
| Benzidine                       | µg/L  | 5.0                        | 0.00012                                      | 0.00012                           | --                         | 2,500                    |
| Benzo(a)Anthracene              | µg/L  | 5.0                        | 0.0044                                       | 0.0044                            | --                         | --                       |
| Benzo(a)Pyrene                  | µg/L  | 2.0                        | 0.0044                                       | 0.0044                            | --                         | --                       |
| Benzo(b)Fluoranthene            | µg/L  | 10                         | 0.0044                                       | 0.0044                            | --                         | --                       |
| Benzo(ghi)Perylene              | µg/L  | 0.1                        | --   | --                                | --                         | --                       |
| Benzo(k)Fluoranthene            | µg/L  | 2.0                        | 0.0044                                       | 0.0044                            | --                         | --                       |



| Priority Pollutant <sup>1</sup> | Units | Minimum<br>ML <sup>1</sup> | Most Stringent<br>CTR<br>Objective/Criterion | Applicable CTR Objective/Criteria |                            |                          |
|---------------------------------|-------|----------------------------|--|-----------------------------------|----------------------------|--------------------------|
|                                 |       |                            |  | Human<br>Health                   | Chronic<br>Aquatic<br>Life | Acute<br>Aquatic<br>Life |
| Bis(2-Chloroethoxy)Methane      | µg/L  | 5.0                        | --   | --                                | --                         | --                       |
| Bis(2-Chloroethyl)Ether         | µg/L  | 1.0                        | 0.031  | 0.031                             | 122                        | 238,000                  |
| Bis(2-Chloroisopropyl)Ether     | µg/L  | 2.0                        | 1,400  | 1,400                             | --                         | --                       |
| Bis(2-Ethylhexyl)Phthalate      | µg/L  | 5.0                        | 1.8  | 1.8                               | --                         | --                       |
| 4-Bromophenyl Phenyl Ether      | µg/L  | 5.0                        | --   | --                                | --                         | --                       |
| Butylbenzyl Phthalate           | µg/L  | 10                         | 3,000  | 3,000                             | --                         | --                       |
| 2-Chloronaphthalene             | µg/L  | 10                         | 1,700  | 1,700                             | --                         | --                       |
| 4-Chlorophenyl Phenyl Ether     | µg/L  | 5.0                        | --   | --                                | --                         | --                       |
| Chrysene                        | µg/L  | 5.0                        | 0.0044                                       | 0.0044                            | --                         | --                       |
| Dibenzo(a,h)Anthracene          | µg/L  | 0.1                        | 0.0044                                       | 0.0044                            | --                         | --                       |
| 1,2-Dichlorobenzene             | µg/L  | 0.5                        | 600  | 600                               | 763                        | --                       |
| 1,3-Dichlorobenzene             | µg/L  | 0.5                        | 400  | 400                               | 763                        | --                       |
| 1,4-Dichlorobenzene             | µg/L  | 0.5                        | 5  | 5                                 | 763                        | --                       |
| 3,3-Dichlorobenzidine           | µg/L  | 5.0                        | 0.04   | 0.04                              | --                         | --                       |
| Diethyl Phthalate               | µg/L  | 2.0                        | 23,000                                       | 23,000                            | --                         | --                       |
| Dimethyl Phthalate              | µg/L  | 2.0                        | 313,000                                      | 313,000                           | --                         | --                       |
| Di-n-Butyl Phthalate            | µg/L  | 10                         | 2,700  | 2,700                             | --                         | --                       |
| 2,4-Dinitrotoluene              | µg/L  | 5.0                        | 0.11   | 0.11                              | 230                        | 330                      |
| 2,6-Dinitrotoluene              | µg/L  | 5.0                        | --   | --                                | --                         | --                       |
| Di-n-Octyl Phthalate            | µg/L  | 10                         | --   | --                                | --                         | --                       |
| 1,2-Diphenylhydrazine           | µg/L  | 1.0                        | 0.040  | 0.040                             | --                         | 270                      |
| Fluoranthene                    | µg/L  | 0.05                       | 300  | 300                               | --                         | --                       |
| Fluorene                        | µg/L  | 0.1                        | 1,300  | 1,300                             | --                         | --                       |
| Hexachlorobenzene               | µg/L  | 1.0                        | 0.00075                                      | 0.00075                           | --                         | 250                      |
| Hexachlorobutadiene             | µg/L  | 1.0                        | 0.44   | 0.44                              | 9.3                        | 90                       |
| Hexachlorocyclopentadiene       | µg/L  | 5.0                        | 50   | 50                                | --                         | --                       |
| Hexachloroethane                | µg/L  | 1.0                        | 1.9  | 1.9                               | 540                        | 980                      |
| Indeno(1,2,3-cd) Pyrene         | µg/L  | 0.05                       | 0.0044                                       | 0.0044                            | --                         | --                       |
| Isophorone                      | µg/L  | 1.0                        | 8.4  | 8.4                               | --                         | 117,000                  |
| Naphthalene                     | µg/L  | 0.2                        | --   | --                                | --                         | --                       |
| Nitrobenzene                    | µg/L  | 1.0                        | 17   | 17                                | --                         | 27,000                   |
| N-Nitrosodimethylamine          | µg/L  | 5.0                        | 0.00069                                      | 0.00069                           | --                         | --                       |
| N-Nitrosodi-n-Propylamine       | µg/L  | 5.0                        | 0.005  | 0.005                             | --                         | 5,850                    |
| N-Nitrosodiphenylamine          | µg/L  | 1.0                        | 5.0  | 5.0                               | --                         | 5,850                    |
| Phenanthrene                    | µg/L  | 0.05                       | --   | --                                | --                         | --                       |
| Pyrene                          | µg/L  | 0.05                       | 960  | 960                               | --                         | --                       |
| 1,2,4-Trichlorobenzene          | µg/L  | 1.0                        | 5  | 5                                 | 250                        | 50                       |
| Aldrin                          | µg/L  | 0.005                      | 0.00013                                      | 0.00013                           | --                         | 3                        |
| alpha-BHC                       | µg/L  | 0.01                       | 0.0039                                       | 0.0039                            | --                         | --                       |
| beta-BHC                        | µg/L  | 0.005                      | 0.014  | 0.014                             | --                         | --                       |
| gamma-BHC                       | µg/L  | 0.02                       | 0.019  | 0.019                             | 0.08                       | 0.95                     |

| Priority Pollutant <sup>1</sup> | Units | Minimum<br>ML <sup>1</sup> | Most Stringent<br>CTR<br>Objective/Criterion | Applicable CTR Objective/Criteria |                            |                          |
|---------------------------------|-------|----------------------------|--|-----------------------------------|----------------------------|--------------------------|
|                                 |       |                            |  | Human<br>Health                   | Chronic<br>Aquatic<br>Life | Acute<br>Aquatic<br>Life |
| delta-BHC                       | µg/L  | 0.005                      | --   | --                                | --                         | --                       |
| Chlordane                       | µg/L  | 0.1                        | 0.00057                                      | 0.00057                           | 0.0043                     | 2.4                      |
| 4,4-DDT                         | µg/L  | 0.01                       | 0.00059                                      | 0.00059                           | 0.001                      | 1.1                      |
| 4,4-DDE                         | µg/L  | 0.05                       | 0.00059                                      | 0.00059                           | --                         | --                       |
| 4,4-DDD                         | µg/L  | 0.05                       | 0.00083                                      | 0.00083                           | --                         | --                       |
| Dieldrin                        | µg/L  | 0.01                       | 0.00014                                      | 0.00014                           | 0.056                      | 0.24                     |
| alpha-Endosulfan                | µg/L  | 0.02                       | 0.056  | 42                                | 0.056                      | 0.22                     |
| beta-Endosulfan                 | µg/L  | 0.01                       | 0.056  | 110                               | 0.056                      | 0.22                     |
| Endosulfan Sulfate              | µg/L  | 0.05                       | 110  | 110                               | --                         | --                       |
| Endrin                          | µg/L  | 0.01                       | 0.036  | 0.76                              | 0.036                      | 0.086                    |
| Endrin Aldehyde                 | µg/L  | 0.01                       | 0.76   | 0.76                              | --                         | --                       |
| Heptachlor                      | µg/L  | 0.01                       | 0.00021                                      | 0.00021                           | 0.0038                     | 0.52                     |
| Heptchlor Epoxide               | µg/L  | 0.01                       | 0.00010                                      | 0.00010                           | 0.0038                     | 0.52                     |
| PCBs sum <sup>2</sup>           | µg/L  | 0.05                       | 0.00017                                      | 0.00017                           | 0.014                      | --                       |
| Toxaphene                       | µg/L  | 0.05                       | 0.0002                                       | 0.00073                           | 0.0002                     | 0.73                     |

<sup>2</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 and in accordance with the General Monitoring Provisions contained in section I of the Monitoring and Reporting Program (Attachment E).

<sup>3</sup> This objective applies to the sum of PCB Aroclors 1242, 1254, 1221, 1232, 1248, 1280, and 1016.

**TABLE B-2. MOST STRINGENT CTR HARDNESS DEPENDENT WATER QUALITY CRITERIA FOR METALS**

| Receiving Water Hardness (mg/L CaCO <sub>3</sub> ) | Most Stringent CTR Water Quality Criterion (µg/L) <sup>A</sup> |                        |        |      |        |        |      |
|--|--|------------------------|--------|------|--------|--------|------|
|  | Cadmium  | Chromium <sup>+3</sup> | Copper | Lead | Nickel | Silver | Zinc |
| 1 - 10   | 0.07   | 4.8                    | 0.18   | 0.01 | 1.1    | 0.01   | 2.4  |
| 11 – 20  | 0.44   | 34                     | 1.4    | 0.19 | 8.1    | 0.09   | 18   |
| 21 – 30  | 0.72   | 58                     | 2.5    | 0.44 | 14     | 0.28   | 32   |
| 31 – 40  | 0.98   | 79                     | 3.4    | 0.72 | 19     | 0.54   | 44   |
| 41 – 50  | 1.2  | 100                    | 4.4    | 1.0  | 25     | 0.88   | 56   |
| 51 – 60  | 1.5  | 120                    | 5.2    | 1.4  | 30     | 1.3    | 68   |
| 61 – 70  | 1.7  | 140                    | 6.1    | 1.7  | 34     | 1.7    | 79   |
| 71 – 80  | 1.9  | 160                    | 7.0    | 2.1  | 39     | 2.3    | 90   |
| 81 – 90  | 2.1  | 170                    | 7.8    | 2.4  | 44     | 2.8    | 100  |
| 91 – 100   | 2.3  | 190                    | 8.6    | 2.8  | 48     | 3.5    | 110  |
| 101 – 110  | 2.5  | 210                    | 9.4    | 3.2  | 53     | 4.1    | 120  |
| 111 – 120  | 2.7  | 230                    | 10     | 3.6  | 57     | 4.9    | 130  |
| 121 – 130  | 2.9  | 240                    | 11     | 4.1  | 61     | 5.6    | 140  |
| 131 – 140  | 3.0  | 260                    | 12     | 4.5  | 66     | 6.5    | 150  |
| 141 – 150  | 3.2  | 270                    | 13     | 4.9  | 70     | 7.3    | 160  |
| 151 – 160  | 3.4  | 290                    | 13     | 5.4  | 74     | 8.2    | 170  |
| 161 – 170  | 3.6  | 310                    | 14     | 5.8  | 78     | 9.2    | 180  |
| 171 – 180  | 3.8  | 320                    | 15     | 6.3  | 82     | 10     | 190  |
| 181 – 190  | 3.9  | 340                    | 15     | 6.8  | 86     | 11     | 200  |
| 191 – 200  | 4.1  | 350                    | 16     | 7.3  | 90     | 12     | 210  |
| 201 - 210  | 4.3  | 370                    | 17     | 7.7  | 94     | 13     | 220  |
| 211 – 220  | 4.4  | 380                    | 18     | 8.2  | 98     | 15     | 230  |
| 221 – 230  | 4.6  | 400                    | 18     | 8.7  | 100    | 16     | 230  |
| 231 – 240  | 4.8  | 410                    | 19     | 9.2  | 110    | 17     | 240  |
| 241 – 250  | 4.9  | 430                    | 20     | 9.7  | 110    | 18     | 250  |
| 251 – 260  | 5.1  | 440                    | 20     | 10   | 110    | 20     | 260  |
| 261 – 270  | 5.2  | 450                    | 21     | 11   | 120    | 21     | 270  |
| 271 – 280  | 5.4  | 470                    | 22     | 11   | 120    | 23     | 280  |
| 281 – 290  | 5.5  | 480                    | 23     | 12   | 130    | 24     | 290  |
| 291 – 300  | 5.7  | 500                    | 23     | 12   | 130    | 25     | 300  |
| 301 – 310  | 5.8  | 510                    | 24     | 13   | 130    | 27     | 300  |
| 311 – 320  | 6.0  | 520                    | 25     | 13   | 140    | 29     | 310  |
| 321 – 330  | 6.2  | 540                    | 25     | 14   | 140    | 30     | 320  |

| Receiving Water Hardness (mg/L CaCO <sub>3</sub> ) | Most Stringent CTR Water Quality Criterion (µg/L) <sup>A</sup> |                        |        |      |        |        |      |
|--|--|------------------------|--------|------|--------|--------|------|
|  | Cadmium  | Chromium <sup>+3</sup> | Copper | Lead | Nickel | Silver | Zinc |
| 331 – 340  | 6.3  | 550                    | 26     | 15   | 140    | 32     | 330  |
| 341 – 350  | 6.5  | 570                    | 27     | 15   | 150    | 33     | 340  |
| 351 – 360  | 6.6  | 580                    | 27     | 16   | 150    | 35     | 350  |
| 361 – 370  | 6.7  | 590                    | 28     | 16   | 150    | 37     | 360  |
| 371 – 380  | 6.9  | 610                    | 29     | 17   | 160    | 39     | 360  |
| 381 – 390  | 7.0  | 620                    | 29     | 17   | 160    | 41     | 370  |
| 391 – 400  | 7.2  | 630                    | 30     | 18   | 170    | 42     | 380  |
| > 400  | 7.3  | 650                    | 31     | 19   | 170    | 44     | 390  |

<sup>A</sup> Water quality criteria are expressed as total recoverable metal and are rounded to two significant figures.

**Table B-3. Screening Levels for Other Pollutants of Concern for Inland Surface Waters, Enclosed Bays and Estuaries**

| Pollutant      | CAS No. | Units | ML (µg/L) | Title 22 Primary MCL (µg/L) |
|----------------|---------|-------|-----------|-----------------------------|
| Aluminum       | 7429905 | mg/L  | 0.5       | 1.0                         |
| Nitrate (as N) | ---     | mg/L  | 2         | 10                          |
| Fluoride       | 7782414 | mg/L  | 1.0       | 2.0                         |

**II. Proposed Discharges to Inland Surface Waters, Enclosed Bays and Estuaries.** In accordance with Receiving Water Limitations VI.A.1, VI.A.2, and VI.A.3 of this General Permit, dischargers seeking authorization to discharge to inland surface waters, enclosed bays and estuaries under this General Permit shall not cause exceedances of the following water quality objectives in the downstream receiving water. pH limits in the following table shall apply as effluent limitations.

**Table B-4. Specific Water Quality Objectives for North Coast Region  
(from Basin Plan Table 3-1)**

| Water Body   | Specific Conductance (micromhos) @ 77 F. |                              | Total Dissolved Solids (mg/L) |                              | Dissolved Oxygen (mg/L) |                              |                              | Hydrogen Ion (pH) |     | Hardness (mg/L)              | Boron (mg/L)                 |                              |
|--|--|------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|------------------------------|-------------------|-----|------------------------------|------------------------------|------------------------------|
|  | 90% Upper Limit <sup>3</sup>             | 50% Upper Limit <sup>2</sup> | 90% Upper Limit <sup>3</sup>  | 50% Upper Limit <sup>2</sup> | Min                     | 90% Lower Limit <sup>3</sup> | 50% Lower Limit <sup>2</sup> | Max               | Min | 50% Upper Limit <sup>2</sup> | 90% Upper Limit <sup>3</sup> | 50% Upper Limit <sup>2</sup> |
| <b>Lost River HA</b>   |  |                              |                               |                              |                         |                              |                              |                   |     |                              |                              |                              |
| Clear Lake Reservoir and Upper Lost River                                | 300                                      | 200                          |                               |                              | 5.0                     |                              | 8.0                          | 9.0               | 7.0 | 60                           | 0.5                          | 0.1                          |
| Lower Lost River   | 1000                                     | 700                          |                               |                              | 5.0                     |                              | --                           | 9.0               | 7.0 | --                           | 0.5                          | 0.1                          |
| Other Streams  | 250                                      | 150                          |                               |                              | 7.0                     |                              | 8.0                          | 8.4               | 7.0 | 50                           | 0.2                          | 0.1                          |
| Tule Lake  | 1300                                     | 900                          |                               |                              | 5.0                     |                              | --                           | 9.0               | 7.0 | 400                          | --                           | --                           |
| Lower Klamath Lake   | 1150                                     | 850                          |                               |                              | 5.0                     |                              | --                           | 9.0               | 7.0 | 400                          | --                           | --                           |
| Groundwater <sup>4</sup>   | 1100                                     | 500                          |                               |                              | --                      |                              | --                           | 8.5               | 7.0 | 250                          | 0.3                          | 0.2                          |
| <b>Butte Valley HA</b>   |  |                              |                               |                              |                         |                              |                              |                   |     |                              |                              |                              |
| Streams  | 150                                      | 100                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0 | 30                           | 0.1                          | 0.0                          |
| Meiss Lake   | 2000                                     | 1300                         |                               |                              | 7.0                     |                              | 8.0                          | 9.0               | 7.5 | 100                          | 0.3                          | 0.1                          |
| Groundwater <sup>4</sup>   | 800                                      | 400                          |                               |                              | --                      |                              | --                           | 8.5               | 6.5 | 120                          | 0.2                          | 0.1                          |
| <b>Shasta Valley HA</b>  |  |                              |                               |                              |                         |                              |                              |                   |     |                              |                              |                              |
| Shasta River   | 800                                      | 600                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0 | 220                          | 1.0                          | 0.5                          |
| Other Streams  | 700                                      | 400                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0 | 200                          | 0.5                          | 0.1                          |
| Lake Shastina  | 300                                      | 250                          |                               |                              | 6.0                     |                              | 9.0                          | 8.5               | 7.0 | 120                          | 0.4                          | 0.2                          |
| Groundwaters <sup>4</sup>  | 800                                      | 500                          |                               |                              | --                      |                              | --                           | 8.5               | 7.0 | 180                          | 1.0                          | 0.3                          |
| <b>Scott River HA</b>  |  |                              |                               |                              |                         |                              |                              |                   |     |                              |                              |                              |
| Scott River  | 350                                      | 250                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0 | 100                          | 0.4                          | 0.1                          |
| Other Streams  | 400                                      | 275                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0 | 120                          | 0.2                          | 0.1                          |
| Groundwaters <sup>4</sup>  | 500                                      | 250                          |                               |                              | --                      |                              | --                           | 8.0               | 7.0 | 120                          | 0.1                          | 0.1                          |
| <b>Salmon River HA</b>   |  |                              |                               |                              |                         |                              |                              |                   |     |                              |                              |                              |
| All Streams  | 150                                      | 125                          |                               |                              | 9.0                     |                              | 10.0                         | 8.5               | 7.0 | 60                           | 0.1                          | 0.0                          |
| <b>Middle Klamath River HA</b>   |  |                              |                               |                              |                         |                              |                              |                   |     |                              |                              |                              |
| Klamath River above Iron Gate Dam including Iron Gate & Copco Reservoirs | 425                                      | 275                          |                               |                              | 7.0                     |                              | 10.0                         | 8.5               | 7.0 | 60                           | 0.3                          | 0.2                          |
| Klamath River below Iron Gate Dam  | 350                                      | 275                          |                               |                              | 8.0                     |                              | 10.0                         | 8.5               | 7.0 | 80                           | 0.5                          | 0.2                          |
| Other Streams  | 300                                      | 150                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0 | 60                           | 0.1                          | 0.0                          |
| Groundwaters <sup>4</sup>  | 750                                      | 600                          |                               |                              | --                      |                              | --                           | 8.5               | 7.5 | 200                          | 0.3                          | 0.1                          |
| <b>Applegate River HA</b>  |  |                              |                               |                              |                         |                              |                              |                   |     |                              |                              |                              |
| All Streams  | 250                                      | 175                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0 | 60                           | --                           | --                           |
| <b>Upper Trinity River HA</b>  |  |                              |                               |                              |                         |                              |                              |                   |     |                              |                              |                              |
| Trinity River <sup>5</sup>   | 200                                      | 175                          |                               |                              | 7.0                     |                              | 10.0                         | 8.5               | 7.0 | 80                           | 0.1                          | 0.0                          |
| Other Streams  | 200                                      | 150                          |                               |                              | 7.0                     |                              | 10.0                         | 8.5               | 7.0 | 60                           | 0.0                          | 0.0                          |
| Claire Engle Lake and Lewiston Reservoir                                 | 200                                      | 150                          |                               |                              | 7.0                     |                              | 10.0                         | 8.5               | 7.0 | 60                           | 0.0                          | 0.0                          |

**Table B-4. Specific Water Quality Objectives for North Coast Region  
(from Basin Plan Table 3-1) (Continued)**

| Water Body                    | Specific Conductance (micromhos) @ 77 F. |                              | Total Dissolved Solids (mg/L) |                              | Dissolved Oxygen (mg/L) |                              |                              | Hydrogen Ion (pH) |              | Hardness (mg/L)              | Boron (mg/L)                 |                              |
|-------------------------------|--|------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|------------------------------|-------------------|--------------|------------------------------|------------------------------|------------------------------|
|                               | 90% Upper Limit <sup>3</sup>             | 50% Upper Limit <sup>2</sup> | 90% Upper Limit <sup>3</sup>  | 50% Upper Limit <sup>2</sup> | Min                     | 90% Lower Limit <sup>3</sup> | 50% Lower Limit <sup>2</sup> | Max               | Min          | 50% Upper Limit <sup>2</sup> | 90% Upper Limit <sup>3</sup> | 50% Upper Limit <sup>2</sup> |
| <b>Hayfork Creek</b>          |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Hayfork Creek                 | 400                                      | 275                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0          | 150                          | 0.2                          | 0.1                          |
| Other Streams                 | 300                                      | 250                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0          | 125                          | 0.0                          | 0.0                          |
| Ewing Reservoir               | 250                                      | 200                          |                               |                              | 7.0                     |                              | 9.0                          | 8.0               | 6.5          | 150                          | 0.1                          | 0.0                          |
| Groundwaters <sup>4</sup>     | 350                                      | 225                          |                               |                              | --                      |                              | --                           | 8.5               | 7.0          | 100                          | 0.2                          | 0.1                          |
| <b>S.F. Trinity River HA</b>  |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| S.F. Trinity River            | 275                                      | 200                          |                               |                              | 7.0                     |                              | 10.0                         | 8.5               | 7.0          | 100                          | 0.2                          | 0.0                          |
| Other Streams                 | 250                                      | 175                          |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 7.0          | 100                          | 0.0                          | 0.0                          |
| <b>Lower Trinity River HA</b> |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Trinity River                 | 275                                      | 200                          |                               |                              | 8.0                     |                              | 10.0                         | 8.5               | 7.0          | 100                          | 0.2                          | 0.0                          |
| Other Streams                 | 250                                      | 200                          |                               |                              | 9.0                     |                              | 10.0                         | 8.5               | 7.0          | 100                          | 0.1                          | 0.0                          |
| Groundwaters <sup>4</sup>     | 200                                      | 150                          |                               |                              | --                      |                              | --                           | 8.5               | 7.0          | 75                           | 0.1                          | 0.1                          |
| <b>Lower Klamath River HA</b> |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Klamath River                 | 300 <sup>6</sup>                         | 200 <sup>6</sup>             |                               |                              | 8.0                     |                              | 10.0                         | 8.5               | 7.0          | 75 <sup>6</sup>              | 0.5 <sup>6</sup>             | 0.2 <sup>6</sup>             |
| Other Streams                 | 200 <sup>6</sup>                         | 125 <sup>6</sup>             |                               |                              | 8.0                     |                              | 10.0                         | 8.5               | 6.5          | 25 <sup>6</sup>              | 0.1 <sup>6</sup>             | 0.0 <sup>6</sup>             |
| Groundwaters <sup>4</sup>     | 300                                      | 225                          |                               |                              | --                      |                              | --                           | 8.5               | 6.5          | 100                          | 0.1                          | 0.0                          |
| <b>Illinois River HA</b>      |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| All Streams                   | 200                                      | 125                          |                               |                              | 8.0                     |                              | 10.0                         | 8.5               | 7.0          | 75                           | 0.1                          | 0.0                          |
| <b>Winchuck River HU</b>      |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| All Streams                   | 200 <sup>6</sup>                         | 125 <sup>6</sup>             |                               |                              | 8.0                     |                              | 10.0                         | 8.5               | 7.0          | 50 <sup>6</sup>              | 0.0 <sup>6</sup>             | 0.0 <sup>6</sup>             |
| <b>Smith River HU</b>         |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Smith River-Main Forks        | 200                                      | 125                          |                               |                              | 8.0                     |                              | 11.0                         | 8.5               | 7.0          | 60                           | 0.1                          | 0.1                          |
| Other Streams                 | 150 <sup>6</sup>                         | 125 <sup>6</sup>             |                               |                              | 7.0                     |                              | 10.0                         | 8.5               | 7.0          | 60 <sup>6</sup>              | 0.1 <sup>6</sup>             | 0.0 <sup>6</sup>             |
| <b>Smith River Plain HSA</b>  |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Smith River                   | 200 <sup>6</sup>                         | 150 <sup>6</sup>             |                               |                              | 8.0                     |                              | 11.0                         | 8.5               | 7.0          | 60 <sup>6</sup>              | 0.1 <sup>6</sup>             | 0.0 <sup>6</sup>             |
| Other Streams                 | 150 <sup>6</sup>                         | 125 <sup>6</sup>             |                               |                              | 7.0                     |                              | 10.0                         | 8.5               | 6.5          | 60 <sup>6</sup>              | 0.1 <sup>6</sup>             | 0.0 <sup>6</sup>             |
| Lakes Earl & Talawa           | --                                       | --                           |                               |                              | 7.0                     |                              | 9.0                          | 8.5               | 6.5          | --                           | --                           | --                           |
| Groundwaters <sup>4</sup>     | 350                                      | 100                          |                               |                              | --                      |                              | --                           | 8.5               | 6.5          | 75                           | 1.0                          | 0.0                          |
| Crescent City Harbor          | --                                       | --                           |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| <b>Redwood Creek HU</b>       |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Redwood Creek                 | 220 <sup>6</sup>                         | 125 <sup>6</sup>             | 115 <sup>6</sup>              | 75 <sup>6</sup>              | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| <b>Mad River HU</b>           |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Mad River                     | 300 <sup>6</sup>                         | 150 <sup>6</sup>             | 160 <sup>6</sup>              | 90 <sup>6</sup>              | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| <b>Eureka Plain HU</b>        |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Humboldt Bay                  | --                                       | --                           | --                            | --                           | 6.0                     | 6.2                          | 7.0                          | 8.5               | <sup>7</sup> |                              |                              |                              |
| <b>Eel River HU</b>           |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Eel River                     | 375 <sup>6</sup>                         | 225 <sup>6</sup>             | 275 <sup>6</sup>              | 140 <sup>6</sup>             | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Van Duzen River               | 375                                      | 175                          | 200                           | 100                          | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| South Fork Eel River          | 350                                      | 200                          | 200                           | 120                          | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |

**Table B-4. Specific Water Quality Objectives for North Coast Region (from Basin Plan Table 3-1) (Concluded)**

| Water Body                   | Specific Conductance (micromhos) @ 77 F. |                              | Total Dissolved Solids (mg/L) |                              | Dissolved Oxygen (mg/L) |                              |                              | Hydrogen Ion (pH) |              | Hardness (mg/L)              | Boron (mg/L)                 |                              |
|------------------------------|--|------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|------------------------------|-------------------|--------------|------------------------------|------------------------------|------------------------------|
|                              | 90% Upper Limit <sup>3</sup>             | 50% Upper Limit <sup>2</sup> | 90% Upper Limit <sup>3</sup>  | 50% Upper Limit <sup>2</sup> | Min                     | 90% Lower Limit <sup>3</sup> | 50% Lower Limit <sup>2</sup> | Max               | Min          | 50% Upper Limit <sup>2</sup> | 90% Upper Limit <sup>3</sup> | 50% Upper Limit <sup>2</sup> |
| Middle Fork Eel River        | 450                                      | 200                          | 230                           | 130                          | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Outlet Creek                 | 400                                      | 200                          | 230                           | 125                          | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| <b>Cape Mendocino HU</b>     |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Bear River                   | 390 <sup>6</sup>                         | 255 <sup>6</sup>             | 240 <sup>6</sup>              | 150 <sup>6</sup>             | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Mattole River                | 300 <sup>6</sup>                         | 170 <sup>6</sup>             | 170 <sup>6</sup>              | 105 <sup>6</sup>             | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| <b>Mendocino Coast HU</b>    |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| Ten Mile River               | --                                       | --                           | --                            | --                           | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Noyo River                   | 185 <sup>6</sup>                         | 150 <sup>6</sup>             | 120 <sup>6</sup>              | 105 <sup>6</sup>             | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Jug Handle Creek             | --                                       | --                           | --                            | --                           | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Big River                    | 300 <sup>6</sup>                         | 195 <sup>6</sup>             | 190 <sup>6</sup>              | 130 <sup>6</sup>             | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Albion River                 | --                                       | --                           | --                            | --                           | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Navarro River                | 285 <sup>6</sup>                         | 250 <sup>6</sup>             | 170 <sup>6</sup>              | 150 <sup>6</sup>             | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Garcia River                 | --                                       | --                           | --                            | --                           | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Gualala River                | --                                       | --                           | --                            | --                           | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| <b>Russian River HU</b>      |  |                              |                               |                              |                         |                              |                              |                   |              |                              |                              |                              |
| (upstream) <sup>8</sup>      | 320                                      | 250                          | 170                           | 150                          | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| (downstream) <sup>9</sup>    | 375 <sup>6</sup>                         | 285 <sup>6</sup>             | 200 <sup>6</sup>              | 170 <sup>6</sup>             | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Laguna de Santa Rosa         | --                                       | --                           | --                            | --                           | 7.0                     | 7.5                          | 10.0                         | 8.5               | 6.5          |                              |                              |                              |
| Bodega Bay                   | --                                       | --                           | --                            | --                           | 6.0                     | 6.2                          | 7.0                          | 8.5               | <sup>7</sup> |                              |                              |                              |
| Coastal Waters <sup>10</sup> | --                                       | --                           | --                            | --                           | <sup>11</sup>           | <sup>11</sup>                | <sup>11</sup>                | <sup>12</sup>     | 12           |                              |                              |                              |

- <sup>1</sup> Water bodies are grouped by hydrologic unit (HU), hydrologic area (HA), or hydrologic subarea (HAS).
- <sup>2</sup> 50% upper and lower limits represent the 50 percentile values of the monthly means for a calendar year. 50% or more of the monthly means must be less than or equal to an upper limit and greater than or equal to a lower limit.
- <sup>3</sup> 90% upper and lower limits represent the 90 percentile values for a calendar year. 90% or more of the values must be less than or equal to an upper limit and greater than or equal to a lower limit.
- <sup>4</sup> Value may vary depending on the aquifer being sampled. This value is the result of sampling over time, and as pumped, from more than one aquifer.
- <sup>5</sup>

|                                    |                 |  |
|------------------------------------|-----------------|--|
| <u>Daily Average Not to Exceed</u> | <u>Period</u>   | <u>River Reach</u>                                     |
| 60°F                               | July 1–Sept. 14 | Lewiston Dam to Douglas City Bridge                    |
| 56°F                               | Sept. 15–Oct. 1 | Lewiston Dam to Douglas City Bridge                    |
| 56°F                               | Oct. 1–Dec. 31  | Lewiston Dam to confluence of North Fork Trinity River |
- <sup>6</sup> Does not apply to estuarine areas.
- <sup>7</sup> pH shall not be depressed below natural background levels.
- <sup>8</sup> Russian River (upstream) refers to the mainstem river upstream of its confluence with Laguna de Santa Rosa.
- <sup>9</sup> Russian River (downstream) refers to the minstem river downstream of its confluence with Laguna de Santa Rosa.
- <sup>10</sup> The State's Ocean Plan applies to all North Coast Region coastal waters.
- <sup>11</sup> Dissolved oxygen concentrations shall not at any time be depressed more than 10 percent from that which occurs naturally.
- <sup>12</sup> pH shall not be changed at any time more than 02 units from that which occurs naturally.
- No water body specific objective available.

**III. Proposed Discharges to Ocean Waters.** Dischargers seeking authorization to discharge to ocean waters under this General Permit shall sample and analyze the effluent for the constituents contained in Table B-5. The results of the analyses shall be compared to the corresponding screening level and shall be submitted as part of the Notice of Intent.

**Table B-5. Water Quality Criteria for the Ocean Plan Table B Pollutants**

| <b>Table B Pollutant</b>      | <b>CAS No.</b> | <b>ML<sup>14</sup><br/>(µg/L)</b> | <b>WQ Criterion<sup>15</sup><br/>(µg/L)</b> |
|-------------------------------|----------------|-----------------------------------|---|
| Arsenic                       | 7440382        | 1.0                               | 8.0   |
| Cadmium                       | 7440439        | 0.2                               | 1.0   |
| Chromium <sup>+6</sup>        | 18540299       | 5.0                               | 2.0   |
| Copper                        | 7440508        | 0.5                               | 3.0   |
| Lead                          | 7439921        | 0.5                               | 2.0   |
| Mercury                       | 7439976        | 0.2                               | 0.04  |
| Nickel                        | 7440020        | 1.0                               | 5.0   |
| Selenium                      | 7782492        | 1.0                               | 15  |
| Silver                        | 7440224        | 0.2                               | 0.7   |
| Zinc                          | 7440666        | 1.0                               | 20  |
| Cyanide                       | 57125          | 5.0                               | 1.0   |
| Ammonia                       | ---            | 200                               | 600   |
| Non-Chlorinated Phenolics     | ---            | 10                                | 30  |
| Chlorinated Phenolics         | ---            | 1                                 | 1.0   |
| Endosulfan                    | ---            | 0.01                              | 0.009                                       |
| Endrin                        | 72208          | 0.01                              | 0.002                                       |
| HCH                           | 58899          | 0.02                              | 0.004                                       |
| Acrolein                      | 107028         | 2.0                               | 220   |
| Antimony                      | 7440360        | 0.5                               | 1,200                                       |
| Bis (2-chloroethoxy) methane  | 111911         | 5.0                               | 4.4   |
| Bis (2-chloroisopropyl) ether | 39638329       | 2.0                               | 1,200                                       |
| Chlorobenzene                 | 108907         | 0.5                               | 570   |
| Chromium (trivalent)          | 7440473        | ---                               | 190,000                                     |
| Di-n-butyl phthalate          | 84742          | 10                                | 3,500                                       |

<sup>14</sup> ML = Minimum Level, established by the *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan). The ML is the concentration in a sample that is equivalent to the concentration in the lowest calibration standard analyzed for a specific analytical procedure, assuming that all method specified sample weights, volumes, and processing steps have been followed. The Reporting Level for each pollutant shall be less than or equal to the ML described in this table.

<sup>15</sup> The listed water quality criterion is the most stringent criterion of those established by the Ocean Plan.



| <b>Table B Pollutant</b>     | <b>CAS No.</b> | <b>ML<sup>14</sup><br/>(µg/L)</b> | <b>WQ Criterion<sup>15</sup><br/>(µg/L)</b> |
|------------------------------|----------------|-----------------------------------|---|
| Dichlorobenzenes             | ---            | 0.5                               | 5,100                                       |
| Diethyl phthalate            | 84662          | 2.0                               | 33,000                                      |
| Dimethyl phthalate           | 131113         | 2.0                               | 820,000                                     |
| 4,6-dinitro-2-methylphenol   | 534521         | 5.0                               | 220   |
| 2,4-dinitrophenol            | 51285          | 5.0                               | 4.0   |
| Ethylbenzene                 | 100414         | 0.5                               | 4,100                                       |
| Fluoranthene                 | 206440         | 0.05                              | 15  |
| Hexachlorocyclopentadiene    | 77474          | 5.0                               | 58  |
| Nitrobenzene                 | 98953          | 1.0                               | 4.9   |
| Thallium                     | 7440280        | 1.0                               | 2.0   |
| Toluene                      | 108883         | 0.5                               | 85,000                                      |
| 1,1,1-trichloroethane        | 71556          | 0.5                               | 540,000                                     |
| Tributyltin                  |                |                                   | 0.0014                                      |
|                              |                |                                   |   |
| Acrylonitrile                | 107131         | 2.0                               | 0.10  |
| Aldrin                       | 309002         | 0.005                             | 0.000022                                    |
| Benzene                      | 71432          | 2.0                               | 5.9   |
| Benzidine                    | 92875          | 5.0                               | 0.000069                                    |
| Beryllium                    | 7440417        | 0.5                               | 0.033                                       |
| Bis (2-chloroethyl) ether    | 111444         | 1.0                               | 0.045                                       |
| Bis (2-ethylhexyl) phthalate | 117817         | 5.0                               | 3.5   |
| Carbon tetrachloride         | 56235          | 0.5                               | 0.90  |
| Chlordane                    | 57749          | 0.1                               | 0.000023                                    |
| Chlorodibromomethane         | 124481         | 0.5                               | 8.6   |
| Chloroform                   | 67663          | 0.5                               | 130   |
| DDT                          | 50293          | 0.01                              | 0.00017                                     |
| 1,4-dichlorobenzene          | 106467         | 0.5                               | 18  |
| 3,3-dichlorobenzidine        | 91941          | 5.0                               | 0.0081                                      |
| 1,2-dichloroethane           | 107062         | 0.5                               | 28  |
| 1,1-dichloroethylene         | 75354          | 0.5                               | 0.9   |
| Dichlorobromomethane         | 75274          | 0.5                               | 6.2   |
| Dichloromethane              | 75092          | 0.5                               | 450   |
| 1,3-dichloropropene          | 542756         | 0.5                               | 8.9   |
| Dieldrin                     | 60571          | 0.01                              | 0.00004                                     |
| 2,4-dinitrotoluene           | 121142         | 5.0                               | 2.6   |
| 1,2-diphenylhydrazine        | 122667         | 1.0                               | 0.16  |
| Halomethanes                 | ---            | ---                               | 130   |
| Heptachlor                   | 76448          | 0.01                              | 0.00005                                     |
| Heptachlor epoxide           | 1024573        | 0.01                              | 0.00002                                     |
| Hexachlorobenzene            | 118741         | 1.0                               | 0.00021                                     |
| Hexachlorobutadiene          | 87683          | 1.0                               | 14  |

| <b>Table B Pollutant</b>  | <b>CAS No.</b> | <b>ML<sup>14</sup><br/>(µg/L)</b> | <b>WQ Criterion<sup>15</sup><br/>(µg/L)</b> |
|---------------------------|----------------|-----------------------------------|---|
| Hexachloroethane          | 67721          | 1.0                               | 2.5   |
| Isophorone                | 78591          | 1.0                               | 730   |
| N-nitrosodimethylamine    | 62759          | 5.0                               | 7.3   |
| N-nitrosodi-N-propylamine | 621647         | 5.0                               | 0.38  |
| N-nitrosodiphenylamine    | 86306          | 1.0                               | 2.5   |
| PAHs                      | ---            | ---                               | 0.0088                                      |
| PCBs                      | ---            | ---                               | 0.000019                                    |
| TCDD equivalents          | ---            | ---                               | 0.0000000039                                |
| 1,1,2,2-tetrachloroethane | 79345          | 0.5                               | 2.3   |
| Tetrachloroethylene       | 127184         | 0.5                               | 2.0   |
| Toxaphene                 | 8001352        | 0.5                               | 0.00021                                     |
| Trichloroethylene         | 79016          | 0.5                               | 27  |
| 1,1,2-trichloroethane     | 19005          | 0.5                               | 9.4   |
| 2,4,6-trichlorophenol     | 88062          | 0.05                              | 0.29  |
| Vinyl chloride            | 75014          | 0.5                               | 36  |

## ATTACHMENT C – DEFINITIONS

### Acute Toxicity:

#### a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{96\text{-hr LC } 50\%}$$

#### b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log (100 - S)}{1.7}$$

where: S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

**Areas of Special Biological Significance (ASBS):** are those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

**Arithmetic Mean ( $\mu$ ),** also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean =  $\mu = \Sigma x / n$                       where:  $\Sigma x$  is the sum of the measured ambient water concentrations, and  $n$  is the number of samples.

**Average Monthly Effluent Limitation (AMEL):** the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Bioaccumulative** pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

**Carcinogenic** pollutants are substances that are known to cause cancer in living organisms.

**Coefficient of Variation (CV)** is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

**Chlordane** shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

**Chronic Toxicity:** This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$TUc = \frac{100}{NOEL}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix II.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that

reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

**DDT** shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

**Degrade:** Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

**Detected, but Not Quantified (DNQ)** are those sample results less than the reported Minimum Level, but greater than or equal to the laboratory's MDL.

**Dilution Credit** is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

**Dichlorobenzenes** shall mean the sum of 1,2- and 1,3-dichlorobenzene.

**Downstream Ocean Waters** shall mean waters downstream with respect to ocean currents.

**Dredged Material:** Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil".

**Effluent Concentration Allowance (ECA)** is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Enclosed Bays** means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

**Estimated Chemical Concentration** is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Endosulfan** shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

**Estuaries and Coastal Lagoons** are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

**Halomethanes** shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

**HCH** shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

**Initial Dilution** is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

**Inland Surface Waters** are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

**Kelp Beds**, for purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

**Mariculture** is the culture of plants and animals in marine waters independent of any pollution source.

**Material:** (a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

**Maximum Daily Effluent Limitation (MDEL)** means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

**Median** is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

**Method Detection Limit (MDL)** is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B.

**Minimum Level (ML)** is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

**Mixing Zone** is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

**Natural Light:** Reduction of natural light may be determined by the Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Water Board.

**Not Detected (ND)** are those sample results less than the laboratory's MDL.

**Ocean Waters** are the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

**PAHs (polynuclear aromatic hydrocarbons)** shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

**PCBs (polychlorinated biphenyls)** shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

**Persistent** pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

**Pollutant Minimization Program (PMP)** means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table B pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

**Pollution Prevention** means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not



include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

**Reported Minimum Level** is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

**Satellite Collection System** is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

**Shellfish** are organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

**Significant Difference** is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

**Six-month Median Effluent Limitation:** the highest allowable moving median of all daily discharges for any 180-day period.

**Source of Drinking Water** is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

**Standard Deviation ( $\sigma$ )** is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:  $x$  is the observed value;  
 $\mu$  is the arithmetic mean of the observed values;  
and  
 $n$  is the number of samples.

**State Water Quality Protection Areas (SWQPAs)** are non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE

(ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

**TCDD Equivalents** shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

| Isomer Group        | Toxicity<br>Equivalence<br>Factor |
|---------------------|-----------------------------------|
| 2,3,7,8-tetra CDD   | 1.0                               |
| 2,3,7,8-penta CDD   | 0.5                               |
| 2,3,7,8-hexa CDDs   | 0.1                               |
| 2,3,7,8-hepta CDD   | 0.01                              |
| octa CDD            | 0.001                             |
| 2,3,7,8 tetra CDF   | 0.1                               |
| 1,2,3,7,8 penta CDF | 0.05                              |
| 2,3,4,7,8 penta CDF | 0.5                               |
| 2,3,7,8 hexa CDFs   | 0.1                               |
| 2,3,7,8 hepta CDFs  | 0.01                              |
| octa CDF            | 0.001                             |

**Toxicity Reduction Evaluation (TRE)** is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

**Waste:** As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

**Water Reclamation:** The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

## **ATTACHMENT D – STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

## **F. Inspection and Entry**

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

## **H. Upset**

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No

determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
  - b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order. (40 C.F.R. § 122.41(f).)

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

### **C. Transfers**

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other

requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

### **III. STANDARD PROVISIONS – MONITORING**

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B. Monitoring results must be conducted according to test procedures under Part 136 (40 C.F.R. § 122.41(j)(4)) [BR edited]

### **IV. STANDARD PROVISIONS – RECORDS**

- A. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application and the NOI for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)
- B. Records of monitoring information shall include:
  - 1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
  - 2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
  - 3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
  - 4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
  - 5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
  - 6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)
- C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):
  - 1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
  - 2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed as follows:
  - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. [40 C.F.R. § 122.22(a)(1)];
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 C.F.R. § 122.22(a)(2)]; or
  - c. For a municipality, State, federal, or other public agency; by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the



- overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 C.F.R. § 122.22(a)(3)].
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
    - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
    - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
  4. If an authorization under Standard Provisions – Reporting B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
  5. Any person signing a document under Standard Provisions – Reporting V above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

#### **D. Compliance Schedules**

The General Permit does not include compliance schedules.

#### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
  - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

## **F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. If the discharge is not an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 CFR 122.42(a), the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR 122.41(l)(1)(ii).)

The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 CFR 122.41(l)(1)(ii).); or

3. If the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge, the alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii).)

## **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with any requirements of this General Permit. (40 C.F.R. § 122.41(l)(2).)

## **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

## **I. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

## **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387

## **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

### **A. Non-Municipal Facilities**

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):
  - a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));
  - b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));
  - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or
  - d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(2)):
  - a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));
  - b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

- c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or
- d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

**ATTACHMENT E – MONITORING AND REPORTING PROGRAM NO. R1-2009-0045**  
**(Revised January 6, 2010)**

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**ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. R1-2009-0045  
(Revised January 6, 2010)**

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

The Regional Water Board Executive Officer may modify the monitoring and reporting program for a specific discharger to reduce monitoring frequency and/or eliminate a monitoring parameter if it can be demonstrated that any reduction in monitoring requirements will not compromise water quality. In addition, the Executive Officer may stipulate conditions and requirements in addition to those established by the MRP for all authorized discharges, including monitoring and reporting requirements, for each specific discharge to assess compliance with requirements of the General Permit and/or to characterize the discharge and/or receiving water quality. Any deviations from this standard MRP that are proposed by the Executive Officer will be identified in the public notice placed on the Regional Water Board's website for each specific applicant.

**I. GENERAL MONITORING PROVISIONS**

- A.** Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health, in accordance with Water Code section 13176, and must include quality assurance/quality control data with their reports.
- B.** If the Discharger monitors any pollutant more frequently than required by this MRP, using test procedures approved by 40 CFR Part 136 or as specified in this MRP, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's self-monitoring reports.
- C.** Samples and measurements taken as required by this MRP shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of the Regional Water Board Executive Officer.
- D.** Monitoring results, including noncompliance, shall be reported at intervals and in the manner specified in this MRP.
- E.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be

properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

- F. Wastewater Monitoring Provision. Composite samples may be taken by a proportional sampling device approved by the Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed one hour.

## II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order.

**Table E-1. Monitoring Station Locations**

| Discharge Point | Monitoring Location  | Monitoring Location Description  |
|-----------------|----------------------|--|
| 001             | EFF-001 <sup>1</sup> | Wastewater to be discharged, following treatment and before contact with receiving water and before dilution by any other water or waste.  |
| 002             | EFF-002              | If more than one discharge point is authorized under the General Permit, compliance monitoring locations shall be named EFF-002, EFF-003, etc. and shall be located to allow collection of wastewater to be discharged, following treatment and before contact with receiving water and before dilution by any other water or waste.   |
| Receiving Water | RSW-001              | Receiving water immediately upstream of the point of discharge at a location unaffected by the discharge to allow collection of water samples or observation of conditions that are representative of upstream, background conditions within the receiving water. Applicable to inland surface waters, enclosed bays and estuaries.  |
| Receiving Water | RSW-002              | Receiving water at an appropriate monitoring location approved by the Executive Officer, downstream of the point of discharge, that represents downstream water quality after mixing of the discharge and receiving water. This monitoring location must be located within 25 feet of the discharge outfall unless otherwise approved by the Discharger. Applicable to inland surface waters, enclosed bays and estuaries. |

## III. INFLUENT MONITORING REQUIREMENTS

This section of the standardized MRP is not applicable to discharges of low threat wastewaters.

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<sup>1</sup> Dischargers enrolled under this General Permit for more than one discharge point must comply with effluent limitations and monitoring requirements at each discharge point.



#### IV. EFFLUENT MONITORING REQUIREMENTS

##### A. Monitoring Locations EFF-001, EFF-002, etc.

1. The Discharger shall monitor the discharge(s) at Monitoring Locations EFF-001, EFF-002, etc. for the constituents identified in Table E-2, and record the monitoring results.

**Table E-2. Effluent Monitoring Requirements**

| Parameter                             | Units            | Sample Type                       | Minimum Sampling Frequency <sup>2</sup> | Required Analytical Test Method |
|---------------------------------------|------------------|-----------------------------------|---|---------------------------------|
| Biochemical Oxygen Demand             | mg/L             | Grab                              | Monthly                                 | Standard Methods <sup>3</sup>   |
| Total Suspended Solids                | mg/L             | Grab                              | Monthly                                 | Standard Methods                |
| Settleable Solids                     | ml/L             | Grab                              | Monthly                                 | Standard Methods                |
| Flow <sup>4</sup>                     | gpd <sup>5</sup> | Meter or Estimate                 | 1X/Day <sup>6</sup>                     | Standard Methods                |
| Chlorine, Total Residual <sup>7</sup> | mg/L             | Field Sample <sup>8</sup>         | Daily                                   | Standard Methods                |
| pH                                    | standard units   | Field Sample <sup>8</sup>         | 4X/day <sup>9</sup>                     | Standard Methods                |
| Temperature                           | °C or °F         | Field Sample <sup>8</sup>         | 4X/day <sup>9</sup>                     | Standard Methods                |
| Turbidity                             | NTU              | Grab or Field Sample <sup>8</sup> | 4X/day <sup>9</sup>                     | Standard Methods                |

<sup>2</sup> The first sample shall be collected at the start of discharge.

<sup>3</sup> In accordance with the most current edition of Standard Methods for the Examination of Water and Wastewater (American Public Health Administration) or current test procedures as specified in 40 CFR 136.

<sup>4</sup> The Discharger shall monitor the flow rate and calculate the average daily flow rate of the discharge during the entire period of the discharge. The flow rate, duration, and total volume of the discharge shall be monitored and reported. Flow estimates are acceptable provided that the basis for the estimates is clearly indicated with the monitoring report(s).

<sup>5</sup> gpd = gallons per day

<sup>6</sup> This flow sampling frequency assumes steady state flow. Flow rate shall be monitored more frequently if flow rate changes. Continuous flow monitoring is desirable if flow rates change frequently.

<sup>7</sup> Chlorine monitoring shall be required when the water being discharged originates from a chlorinated water source or has otherwise been chlorinated.

<sup>8</sup> All field equipment shall be properly calibrated. Calibration records shall be retained for a period of three years.

<sup>9</sup> Field sampling for pH, temperature, turbidity, specific conductance and dissolved oxygen shall occur twice hourly until such time that steady state compliance conditions for all parameters are established. Thereafter, field sampling for pH, temperature, turbidity, specific conductance and dissolved oxygen shall occur four times per day, evenly spaced during the hours that the discharge is manned. Field sampling shall occur more frequently if needed to demonstrate compliance with effluent and receiving water limitations.

| Parameter                         | Units    | Sample Type                       | Minimum Sampling Frequency <sup>2</sup> | Required Analytical Test Method |
|-----------------------------------|----------|-----------------------------------|---|---------------------------------|
| Specific Conductance (@ 25°C)     | µmhos/cm | Grab or Field Sample <sup>8</sup> | 4X/day <sup>9</sup>                     | Standard Methods                |
| Dissolved Oxygen                  | mg/L     | Field Sample <sup>8</sup>         | 4X/day <sup>9</sup>                     | Standard Methods                |
| Visual Observations <sup>10</sup> | ---      | Visual                            | Daily                                   | Standard Methods                |
| Other <sup>11</sup>               | ---      | ---                               |   | Standard Methods                |

2. The Discharger shall take photographs at the point of discharge (discharge outfall) at the commencement of the discharge and daily thereafter, at a time of peak discharge. The photographs shall be labeled with a date and time and shall be included with monitoring reports submitted to the Regional Water Board.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

The General Permit does not require whole effluent toxicity testing.

## VI. LAND DISCHARGE MONITORING REQUIREMENTS

The General Permit is not applicable to discharges to land and therefore does not establish monitoring requirements for wastewater that is land applied.

## VII. RECLAMATION MONITORING REQUIREMENTS

The General Permit is not applicable to reclamation uses of wastewater and therefore does not establish monitoring requirements for wastewaters that are reclaimed in lieu of discharge.

<sup>10</sup> Visual observations shall include the appearance of the discharge including color, turbidity, floating or suspended matter or debris, appearance of the receiving water at the point of discharge (occurrence of erosion and scouring, turbidity, solids deposition, unusual aquatic growth, etc), and observations about the receiving water, such as the presence of aquatic life.

<sup>11</sup> When granting authorization to discharge under the General Permit, the Regional Water Board Executive Officer may stipulate conditions in addition to the requirements described by the General Permit for all authorized discharges, including monitoring requirements, for a specific discharge. Such monitoring requirements shall become enforceable requirements of the General Permit and may include effluent and/or receiving water monitoring requirements. When the discharge originates from groundwater with naturally occurring arsenic, monitoring the discharge for arsenic may be required. When the discharge originates from a potable supply, monitoring for the trihalomethanes may be required in the discharge. When stream scouring or bank erosion is a concern, for example, monitoring for suspended solids in receiving water, upstream and downstream of the point of discharge, may be required.

## VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

### A. Monitoring Locations RSW-001 and RSW-002 for Discharges to Inland Surface Waters, Enclosed Bays and Estuaries

1. The Discharger shall monitor receiving water at Monitoring Locations RSW-001 and RSW-002 for the constituents identified in Table E-3 and record the monitoring results.

**Table E-3. Receiving Water Monitoring Requirements**

| Parameter                         | Units            | Sample Type                       | Minimum Sampling Frequency | Required Analytical Method |
|-----------------------------------|------------------|-----------------------------------|----------------------------|----------------------------|
| Flow                              | gpd, mgd, or cfs | Continuous                        | Daily                      | Standard Methods           |
| pH                                | standard units   | Field Sample <sup>8</sup>         | 4X/day <sup>9</sup>        | Standard Methods           |
| Temperature                       | °C or °F         | Field Sample <sup>8</sup>         | 4X/day <sup>9</sup>        | Standard Methods           |
| Turbidity                         | NTU              | Grab or Field Sample <sup>8</sup> | 4X/day <sup>9</sup>        | Standard Methods           |
| Specific Conductance @25°C        | µmhos/cm         | Grab or Field Sample <sup>8</sup> | 4X/day <sup>9</sup>        | Standard Methods           |
| Dissolved Oxygen                  | mg/L             | Field Sample <sup>8</sup>         | 4X/day <sup>9</sup>        | Standard Methods           |
| Visual Observations <sup>10</sup> | ---              | Visual                            | Daily                      | ---                        |
| Other <sup>11</sup>               | ---              | ---                               | ---                        | ---                        |

2. In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001 and RSW-002. Attention shall be given to the presence or absence of:
  - a. Erosion or scouring caused or exacerbated by the discharge;
  - b. Nuisance conditions such as algae, fungi, slimes, or objectionable growths, mosquitoes, flooding, etc) caused or exacerbated by the discharge
  - b. Floating or suspended matter;
  - c. Bottom deposits;
  - d. Aquatic life;

- e. Visible films, sheens, or coatings;

Notes on receiving water conditions shall be summarized in the monitoring report submitted to the Regional Water Board.

- 3. The Discharger shall take photographs of the receiving water at Monitoring Location RSW-002 prior to commencement of discharge and, when discharging, one time per week at a time of peak discharge. The photographs shall be labeled with a date and time and shall be included with monitoring reports submitted to the Regional Water Board.

## **IX. OTHER MONITORING REQUIREMENTS**

This section is not applicable as there are no additional monitoring requirements to add.

## **X. REPORTING REQUIREMENTS**

### **A. General Monitoring and Reporting Requirements**

- 1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
- 2. The Discharger shall report to the Regional Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.
- 3. Noncompliance Reporting. The Discharger shall report by telephone any noncompliance with Order No. R1-2009-0045, including any violation of discharge prohibitions, discharge limitations or receiving water limitations, or evidence that the discharge has adversely impacted any beneficial use of the receiving water. The telephone report must be made by calling the Regional Water Board staff person assigned to the enrolled project or an available Regional Water Board staff person (707-576-2220), as soon as possible, but no later than 24 hours from the time the Discharger becomes aware of the noncompliance.

### **B. Self Monitoring Reports (SMRs)**

- 1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-4. Monitoring Periods and Reporting Schedule**

| Sampling Frequency | Monitoring Period Begins On... | Monitoring Period  | SMR Due Date  |
|--------------------|--------------------------------|--|---|
| Continuous         | When discharge is initiated    | All  | <p><b>For discharges that are two weeks or less in duration:</b> A single monitoring report shall be submitted within 30 days of ceasing the discharge.</p> <p><b>For discharges of longer duration:</b> Monthly reports shall be submitted by the 1<sup>st</sup> day of the 2<sup>nd</sup> month following the monitoring period</p> |
| Daily              | When discharge is initiated    | (Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.  |   |
| Weekly             | When discharge is initiated    | If discharge lasts less than a month, each full week following the discharge initiation date. If discharge lasts longer than one month, Sunday through Saturday.                           |   |
| Monthly            | When discharge is initiated    | 1 <sup>st</sup> day of calendar month through last day of calendar month. If discharge lasts less than a month, but spans two months, the monitoring period shall be the discharge period. |   |
| Quarterly          |                                |  |   |

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
  - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
5. The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
  - b. The SMR shall contain documentation to demonstrate that field sampling staff have been properly trained and that all field equipment used for water quality monitoring was properly calibrated.
  - c. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:
    - (1) Facility name;
    - (2) WDID number;

- (3) Applicable period of monitoring and reporting;
  - (4) Any variations from the Notice of Intent;
  - (5) A brief evaluation of the effectiveness of all treatment methods and/or management measures implemented;
  - (6) If the discharge resulted in observable changes or impacts in the receiving water, including, but not limited to, discoloration or turbidity and an explanation of upstream and downstream conditions identified in the receiving water monitoring required by section VIII.A of this Monitoring and Reporting Program;
  - (7) Identification and explanation of any violations of the General Permit (include a description of the requirement that was violated and a description of the violation);
  - (8) Explanation of corrective actions taken or planned to comply with the General Permit,
  - (9) The proposed time schedule for any corrective actions planned;
  - (10) Identification and explanation of any complaints caused by the discharge;
  - (11) Authorized signature; and
  - (12) Certification Statement: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- d. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

North Coast Regional Water Board  
5550 Skylane Boulevard, Suite A  
Santa Rosa, California 95403

**C. Discharge Monitoring Reports (DMRs)**

Discharge Monitoring Reports are not required under this Order.

**D. Other Reporting Requirements**

1. Notice of Start Up. The Discharger shall notify the appropriate Regional Water Board staff person by telephone or email at least three (3) days before initiating an authorized discharge, unless a shorter notification period is authorized by the Regional Water Board Executive Officer.
2. Notice of Termination. Using the Notice of Termination (NOT) form provided as Attachment G to this General Permit, within 30 days following permanent termination of an authorized discharge, dischargers shall provide notice that the authorized discharge has been completed.



## ATTACHMENT F – FACT SHEET

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## **ATTACHMENT F – FACT SHEET**

As described in section III of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to discharges authorized for coverage under this General Permit. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

### **I. PERMIT INFORMATION**

#### **A. Background**

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act) was amended to provide that the discharge of pollutants to waters of the United States from any point source is effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) Permit. On 22 September 1989, the United States Environmental Protection Agency (USEPA) granted the State of California, through the State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (Regional Water Boards), the authority to issue general NPDES permits pursuant to 40 Code of Federal Regulations (CFR) Parts 122 and 123.

40 CFR 122.28 provides for issuance of general permits to regulate a category of point sources if the sources involve the same or substantially similar types of operations; discharge the same type of waste; require the same type of effluent limitations or operating conditions; require similar monitoring; and are more appropriately regulated under a general order rather than individual orders.

On May 27, 1993, the Regional Water Board adopted Order No. 93-61 (General NPDES Permit No. CA 0024902) – Waste Discharge Requirements for Discharges of Groundwater to Surface Water Related to Construction and Subsurface Seepage Dewatering Activities in the North Coast Region. The requirements of Order No. 93-61 have been continued and remain in effect until new Waste Discharge and NPDES Requirements are adopted pursuant to this Order.

This new General Permit reissues and updates the requirements of Order No. 93-61 to conform to current regulations. This new General Permit is expanded to cover low threat discharges that meet the criteria specified in sections I.B.1 and II of the Order, including a requirement that in order to receive authorization to discharge to surface waters during the prohibition periods set out in the Basin Plan (May 15-September 30 on the Mad, Eel and Russian Rivers, and year-round in all other surface water bodies within the North Coast Region), each applicant will need to demonstrate that all

alternatives to surface water discharge have been exhausted. This new General Permit is also part of a Region-wide effort to regulate low threat discharges in a consistent manner.

This new General Permit was developed concurrently with a Basin Plan amendment, titled *Amendment to the Point Source Measures in Section 4 of the Water Quality Control Plan for the North Coast Region to Revise the Action Plan for Storm Water Discharges and Include a New Action Plan for Low Threat Discharges to Provide Exception Criteria to the Waste Discharge Prohibitions* (Low Threat Discharge Amendment) which provides exception criteria to the seasonal discharge prohibitions and the one-percent flow limitation in section IV (Implementation Plans) of the Basin Plan. Section IV of the Basin Plan contains point source prohibitions that limit point source waste discharges to the Mad, Eel and Russian Rivers and their tributaries to the period of October 1 through May 14 each year (seasonal discharge prohibition) and disallow point source waste discharges to all other surface water bodies in the North Coast Region year round (year-round prohibition). The Basin Plan also includes a discharge flow rate limitation for the Mad, Eel, and Russian Rivers, requiring that waste discharge flow must be no greater than one percent of the receiving stream's flow, although the Regional Water Board may consider exceptions for cause to this waste discharge rate limitation.

The year-round and seasonal point source prohibitions and the one-percent flow limitation are intended to protect water quality and beneficial uses of the waterbodies in the North Coast Region, but they do not contain the flexibility to permit the discharge of water considered to be a low threat to water quality during the stated discharge prohibition periods. These point source prohibitions currently apply to the discharge of water that meets water quality objectives and may not pose a threat to water quality, such as uncontaminated groundwater pumped from a well. This is because almost all water has some small amount of pollutants, and would be considered the discharge of waste under the Porter-Cologne Water Quality Act. Pollutants that are most common in low threat discharges are sediment, elevated temperature, and chlorine.

Once the Low Threat Discharge Amendment is fully approved (e.g, Regional Water Board adoption and State Water Board Office of Administrative Law and USEPA approvals), applicants under this General Permit will be able to request exceptions to the point source prohibitions and the one-percent flow limitation upon demonstration that all alternatives to surface water discharge have been exhausted, including a demonstration that justifies the need for a discharge during the discharge prohibition periods. For discharges to the Mad, Eel and Russian Rivers and their tributaries, the applicant must demonstrate why the surface water discharge cannot occur during the allowable discharge period of October 1 to May 14. For point source waste discharges to all other surface water bodies, a demonstration of why a surface water discharge is necessary must always be made. Requests for exception from the one-percent

discharge limitation must include documentation that the discharge meets the eligibility criteria identified in section II.A.3 of the General Permit.

## **B. General Criteria**

1. This Order serves as a general NPDES Permit for the discharge to surface waters of wastewater with a low threat to water quality. The following low threat discharges may be covered under this General Permit:
  - a. Construction dewatering of water where sediment and naturally occurring parameters (e.g., naturally occurring metals or salts, temperature, pH, etc.) in area ground water are the only pollutants of concern;
  - b. Discharges resulting from maintenance, disinfection, cleaning or flushing of uncontaminated water supply wells, pipelines, tanks and reservoirs where chlorine, chlorine by-products, and naturally occurring parameters (e.g., naturally occurring metals, temperature, pH, etc.) in the water supply are the only pollutants of concern;
  - c. Discharges resulting from well development, test pumping, maintenance, and purging of uncontaminated water supply or geothermal wells where sediment and naturally occurring parameters (e.g., naturally occurring metals or salts, temperature, pH, etc.) in area ground water and chlorine and chlorine disinfection by-products from well disinfection are the only pollutants of concern;
  - d. Hydrostatic testing, maintenance, repair, and disinfection of potable water supply pipelines, tanks, and reservoirs, where chlorine, chlorine by-products, and naturally occurring parameters (e.g., naturally occurring metals, temperature, pH, etc.) in the water supply are the only pollutants of concern;
  - e. Hydrostatic testing of newly constructed pipelines, tanks, and reservoirs used for purposes other than potable water supplies, where chlorine, chlorine by-products and naturally occurring parameters (e.g., naturally occurring metals, temperature, pH, etc.) in the water supply are the only pollutants of concern;
  - f. Subterranean seepage dewatering (dewatering of structures situated below ground level such as basements, roadways, etc), where sediment and naturally occurring parameters (e.g., naturally occurring metals or salts, temperature, pH, etc.) in the area groundwater are the only pollutants of concern;
  - g. Discharges resulting from dewatering of uncontaminated dredge spoils, where sediment and naturally occurring parameters (e.g., naturally occurring metals or salts, temperature, pH, etc.) are the only pollutants of concern;
  - h. Other similar types of point source discharges that pose a low threat to water quality, yet technically must be regulated under an NPDES permit. This could include discharges that result from fire hydrant testing or flushing air conditioning

condensate if these discharges are discharged directly to a surface water body or to a storm drain system that is not regulated under an NPDES permit.

Proposed low-threat discharges to storm drains that are regulated under an Municipal separate storm sewer system (MS4) permit may be regulated under the MS4 permit provided that the MS4 permittee has developed a programmatic BMP plan that applies to non-storm water discharges to the permitted storm drain system that has been approved by the Regional Water Board (Phase 1 MS4 permittees) or Regional Water Board Executive Officer (Phase 2 MS4 permittees). On a case-by-case basis, it may be determined that proposed discharges to a permitted MS4 storm drain system may be more effectively regulated through enrollment under this Low Threat General Permit.

2. On April 1, 1997, the State Water Board adopted Order No. 97-03-DWQ, NPDES General Permit No. CAS000001 for the regulation of storm water discharges associated with industrial activities. Special Condition D.1 of Order No. 97-03-DWQ authorizes non-storm water discharges. Special Condition D.1.c of Order No. 97-03-DWQ allows the Regional Water Board to establish additional monitoring and reporting requirements for these discharges. The Regional Water Board finds that the additional monitoring and reporting requirements and discharge limitations contained in this General Permit for low threat discharges are necessary to ensure compliance with water quality objectives and standards and that coverage under this Order is therefore necessary for the following discharges listed in Special Condition D.1 of Order No. 97-03-DWQ, unless the discharge is to a municipal storm drain system covered by a Regional Water Board individual permit or by State Water Board Water Quality Order No. 2003-0005-DWQ, General Permit for Storm Water Discharges From Small Municipal Separate Storm Water Sewer Systems and the municipal storm water permittee has an approved programmatic best management plan that applies to non-storm water discharges to the permitted storm drain system: fire hydrant flushing; potable water sources, including potable water related to the operation, maintenance, or testing of potable water systems; atmospheric condensates including refrigeration, air conditioning and compressor condensate, and groundwater dewatering systems.
3. On August 19, 1999, the State Water Board adopted Order No. 99-08-DWQ, NPDES General Permit No. CAS000002 for the regulation of storm water discharges associated with construction activities. Special Provision C.3 of Order No. 99-08-DWQ allows for the limited discharge of non-storm water discharges where they do not cause or contribute to a violation of any water quality standard. The Receiving Water Limitations of Order No. 99-08-DWQ require compliance with all applicable water quality standards including those contained in the Basin Plans. The Regional Water Board finds that Order No. 99-08-DWQ provides adequate water quality protection and compliance monitoring. Most non-storm water discharges related to construction activities may continue to be regulated under Order No. 99-08-DWQ while construction activities continue.

The Regional Water Board further finds that the additional monitoring and reporting requirements and discharge limitations contained in this General Permit for low threat discharges are necessary to ensure compliance with water quality objectives and standards and that coverage under this Order is therefore necessary for construction dewatering projects.

4. This Order does not cover the following:
- a. Discharges which, based on the judgment of Regional Water Board Executive Officer, do not meet the definition of “low threat” as contemplated by this General Permit.
  - b. Discharges that are insufficiently characterized and thereby preclude a determination as to suitability for coverage under the General Permit.
  - c. On-going high volume discharges. Discharges that fall into this category would require individual permit coverage.
  - d. Discharges that would require extensive biological or chemical treatment in order to meet effluent limitations or water quality objectives.
  - e. Discharges that cause acute or chronic toxicity to aquatic life in the receiving waters.
  - f. Discharges from groundwater cleanup projects, including but not limited to sites polluted by industrial activities, above ground or underground leaking tanks, and agricultural practices (e.g., farming practices, etc.) Discharges of highly treated groundwater to surface waters following extraction and cleanup of groundwater polluted with petroleum hydrocarbons and volatile organic compounds should apply for coverage under Order No. R1-2006-0048.
  - g. Discharges of groundwater which has been polluted by industrial activities, above or underground leaking tanks, or agricultural (e.g. farming) practices, even if the project and/or proponent has no connection with the contamination.
  - h. Discharges that contain chemical pollutants or physical or biological properties that may adversely impact beneficial uses and/or exceed any applicable water quality objective. Chemical pollutants of concern include, but are not limited to industrial chemicals, chlorinated hydrocarbons, or organic wastes, herbicides, pesticides, oil and grease, bacteria, radioactivity, and salinity. Biological properties of concern include, but are not limited to bacteria, algae, or undesirable aquatic organisms (e.g., mosquito larvae). Physical properties of concern, include, but are not limited to temperature, dissolved oxygen, pH, conductivity, and turbidity (sediment).



- i. Discharges that would create nuisance conditions such as vector problems or localized flooding.
- j. Discharges that will adversely affect a listed endangered or threatened species or their critical habitat.

This General Permit does not apply to projects that would have adverse impacts on sensitive species and habitat, including but not limited to, rare, threatened, and endangered species or any other habitat deemed sensitive by the California Department of Fish and Game, U.S. Fish and Wildlife Service, National Marine Fisheries Service or any other resource agency. These agencies will be consulted through the public notice process identified in sections II.B.2 and II.B.3 of the General Permit to determine if the proposed discharge or implementation of BMPs (e.g., such as those that require substantial earth movement) have the potential to adversely impact sensitive communities or habitat (aquatic, riparian, or terrestrial (including wetlands and vernal pools). If a sensitive community or habitat is identified, the Discharger shall implement any mitigation measures identified by the consulting agency to avoid adverse impacts. If no such mitigation is available, the discharge shall not be authorized to discharge under this General Permit.

- k. Discharges to Areas of Special Biological Significance.
- l. Discharges that could have a significant impact on biological or cultural resources, aesthetics, or air quality.

Biological, cultural resources and air resource agencies will be consulted, as necessary through the public notice process identified in sections II.B.2 and II.B.3 of this General Permit to determine if the proposed discharge or implementation of BMPs have the potential to adversely impact biological, cultural, or air resources.

If a low threat project requires the implementation of BMPs that involve substantial disturbance of land that has not been disturbed previously, a cultural resources investigation shall be conducted before any substantial disturbance of land occurs in relation to the BMP. The cultural resources investigation will include, at a minimum, a records search for previously identified cultural resources and previously conducted cultural resources investigations of the project parcel and vicinity. This record search will include, at a minimum, contacting the appropriate information center of the California Historical Resources Information System, operated under the auspices of the California Office of Historic Preservation. In coordination with the information center or a qualified historian, a determination shall be made regarding whether previously identified cultural resources will be affected by the proposed project and if previously conducted investigations were performed to satisfy the requirements

of CEQA. If not, a cultural resources survey shall be conducted. The purpose of this investigation will be to identify resources before they are affected by a proposed project and avoid the impact. If the impact is unavoidable, mitigation will be determined on a case-by-case basis, as warranted.

- m. Discharges that could significantly alter the existing drainage pattern of the discharge site or surrounding area or result in downstream erosion.
- n. Discharges that do not consist solely of low threat wastewater. If a low threat discharge mixes with other wastewater (e.g., storm water, domestic wastewater, or industrial process wastewater) prior to contacting receiving water, the other wastewater must be covered under an NPDES permit if required.

If an applicant plans to discharge a low threat wastewater in combination with another wastewater, this fact must be disclosed in the NOI and demonstration must be made that the other wastewater is covered under any required NPDES permits. Storm water discharges would require coverage under an NPDES permit if it is associated with (1) construction that involves the disturbance of greater than an acre of land (requires coverage under the Statewide General Construction Storm Water Permit (2) an industrial facility that requires coverage under the Statewide General Industrial Storm Water Permit; or (3) a discharge covered under a municipal storm water permit (individual or general).

- o. Discharges from industrial facilities that are subject to Effluent Limitations Guidelines promulgated by the USEPA pursuant to CWA section 304 (b), which limits the discharge of pollutants from these facilities.
- p. Discharges that are not consistent with State and federal antidegradation policies.
- q. Discharges that result from releases from pipeline breaks or other spills.

Accidental releases from pipeline breaks are not appropriately covered under this General Permit because these events are unplanned and therefore pollutants such as chlorine cannot be removed prior to discharge. When leaks or spills occur, they should be promptly reported and remediated as necessary. The Regional Water Board will evaluate its response to such events based on the particular circumstances of the release such as the size, effect, and nature of the spill events as well as the Discharger's response actions.

- r. Discharges to a sanitary sewer or discharges covered by an individual NPDES permit.
5. Dischargers of low threat discharges that are already covered under the NPDES program, whether by general or individual permit other than Order No. 93-61, may elect to continue coverage under the existing permit or may submit a complete

Notice of Intent for coverage under this General Permit. Dischargers who submit a complete Notice of Intent under this General Permit are not required to submit an individual permit application. The Regional Water Board may request additional information and determine that a Discharger is not eligible for coverage under this General Permit and would be better regulated under an individual or other general NPDES permit or, for discharges to land, under WDRs. If the Regional Water Board issues an NPDES permit or WDRs for a discharge that is otherwise covered by this General Permit, the applicability of this General Permit to the specified discharge is immediately terminated on the effective date of the NPDES permit or WDRs.

## **II. APPLICATION/ENROLLMENT REQUIREMENTS**

### **A. Application for Coverage Under this General Permit.**

Dischargers enrolling for coverage under this General Permit are required to submit the appropriate filing fee as required by Title 23 of the California Code of Regulations, Division 3, Chapter 9, Article 1. This schedule is complex and is subject to revision. Each applicant shall contact the appropriate Regional Water Board staff person to determine the appropriate annual fee. If the proposed discharge has a duration of one year or more, an annual filing fee will be required each year.

Dischargers enrolling for coverage under this General Permit must also submit a complete Notice of Intent at least 90 days in advance of the proposed project start date. The 90 days may be decreased at the discretion of the Regional Water Board Executive Officer. The Notice of Intent is detailed in Attachment A, and requires submittal of the following information and data:

1. General information about the Discharger and the Discharger's representatives (e.g., contractors, professional engineer).
2. Information about the existing or proposed discharge, including, but not limited to the source of the discharge, discharge rate and volume, and discharge characterization (see item 3 that follows). If a Discharger is requesting an exception to the one-percent discharge limitation, that Discharger must submit information to demonstrate that it meets the eligibility criteria identified in section II.A.3 of the General Permit.
3. Pollutants of concern and wastewater sampling.

Dischargers to inland surface waters, enclosed bays or estuaries applying for coverage under this Permit are required to analyze the proposed discharge for constituents regulated under the California Toxics Rule (CTR) (listed in Attachment B, Tables B-1, B-2, and B-3) and biochemical oxygen demand, total suspended solids, settleable solids, total chlorine, pH, temperature, dissolved

oxygen, specific conductance, hardness, turbidity, nitrate, and total dissolved solids, and submit the results with the Notice of Intent.

Dischargers to ocean waters are required to analyze the proposed discharge for constituents regulated under the Ocean Plan (listed in Attachment B, Table B-5) and oil and grease, total suspended solids, settleable solids, turbidity, and pH, and submit the results with the Notice of Intent.

The screening levels for the constituents in Attachment B, Tables B-1, and B-2 are based on the most restrictive water quality objectives/criteria from the California Toxics Rule. The screening levels in Table B-3 are based on primary maximum contaminant levels from Title 22 of the California Code of Regulations. The most restrictive criteria are necessary because this Order is intended as a general order and covers low threat discharges to all surface waters in the North Coast Region of California. If the analytical test results of the discharge show that any constituent concentrations exceed the water quality screening levels listed in Attachment B, then the discharge will not be allowed under this General Permit. If the analytical test results of the discharge show that all constituent concentrations are below the screening levels in Attachment B, then the Discharger will be enrolled under this General Permit.

Section 1.3, Step 8 of the SIP reads, in part, *“The RWQCB shall require periodic monitoring (at least once prior to the issuance and reissuance of a permit) for pollutants for which criteria or objectives apply and for which no effluent limitations have been established; however, the RWQCB may choose to exempt low volume discharges, determined to have no significant adverse impact on water quality, from this monitoring requirement.”* Certain types of low volume discharges may qualify for an exception to the sampling requirements contained in Attachment B, provided the Discharger can sufficiently justify that the discharge will have no significant adverse impact on water quality. For example, discharges of potable water from line flushing could be exempt from pesticide analysis since the presence of such pesticides would not be allowed in the potable water system. Dischargers seeking an exception to the sampling requirements contained in Attachment B must submit justification as part of the Notice of Intent. If the Regional Water Board finds that the justification is not sufficient to grant an exception to the sampling requirements, the Discharger will be required to analyze the existing or proposed discharge for all constituents regulated under the CTR, as listed in Attachment B, and submit the analytical test results.

If a Discharger discharges or proposes to discharge into a water quality limited segment (WQLS), the Discharger must sample the discharge for the constituents causing the impairment in the receiving water under the current 303(d) list and submit the result with the Notice of Intent. The list of WQLSs can be found under the Clean Water Act (CWA), Section 303(d) List at the web site:

[http://www.waterboards.ca.gov/northcoast/water\\_issues/programs/tmdls/303d/](http://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/303d/). If the analytical data demonstrate that constituent concentrations in the discharge will substantially contribute to the impairment of the receiving water, the discharge will not be authorized under this General Permit.

4. Identification of known groundwater contamination sites (for discharges of groundwater).

If the proposed discharge involves the discharge of groundwater, the applicant must contact Regional Water Board Cleanups Division staff and/or the County underground tank program staff to identify whether there are known groundwater contamination sites within ½ mile of the proposed project. The applicant will need to demonstrate that the proposed discharge is not currently impacted due to nearby groundwater contamination and that pumping of groundwater will not cause contaminants from nearby contaminated sites to be drawn to the proposed project site and inadvertently discharged.

5. Evaluation of reclamation options and/or alternative disposal options.

Pursuant to section 2, Article X, California Constitution, and Water Code section 275, on preventing waste and unreasonable use of waters of the state, the Regional Water Board encourages, wherever practicable, water conservation and/or re-use of wastewater. Therefore, to obtain coverage under this Order, Dischargers are required to evaluate reclamation and/or alternative disposal options. These options include, but are not limited to:

a. Sanitary Sewage System

If all the discharge is accepted by the local municipal wastewater treatment plant (WWTP), then authorization to discharge under an NPDES permit is not needed for the proposed project. Dischargers may submit any denial or restrictive flow letter from the WWTP as proof that this option is not viable or explain why it is infeasible to connect to the WWTP.

b. Land Reclamation/Disposal

Each Discharger must evaluate all reasonable land reclamation and disposal options, including, but not limited to irrigation of nearby urban or agricultural land or use for dust control. Land reclamation generally refers to application of the water at agronomic rates of existing vegetation, while land disposal involves application of water at greater than agronomic rates of existing vegetation or discharge to infiltration basins in a manner that may allow the wastewater to reach groundwater. The land reclamation/disposal option is usually restricted to the dry season (May through October) unless the

Discharger can demonstrate that the discharge can be retained on land during the wet season (November through April).

If land reclamation/disposal is not proposed, the Discharger must fully explain why land reclamation/disposal is not a viable option.

c. Water Conservation

The Discharger must evaluate whether there are any viable options to reduce the discharge volume through water conservation measures.

6. Receiving water characterization, including, but not limited to, name of receiving water, receiving water flow, bank and in-stream conditions, and basic receiving water quality data.

The receiving water characterization is an important element of the evaluation. Even if the proposed discharge contains no pollutants of concern, the discharge must be conducted in a manner that protects beneficial uses. For example, if a stream will be dry at the time of a proposed discharge, the Discharger must be able to demonstrate that the discharge will not cause erosion or disrupt the life cycle of amphibians or other aquatic life that depend on the non-flowing conditions for part of their life cycle. If a low flow stream has pools that are populated with salmonids or other aquatic life, the Discharger would need to demonstrate that a short-term, high flow rate discharge will not disrupt or harm the aquatic life.

7. Description of any proposed treatment system.

Though treatment of the effluent is not required by this General Permit, continuous compliance with the requirements of this General Permit is required and may depend on some form of treatment being provided prior to discharge. It is anticipated that many dischargers will need to implement simple, low technology treatment measures such as dechlorination, sediment removal (sedimentation tanks or filters), and/or pH adjustments. Each discharger must demonstrate that the treatment is adequate to remove or reduce pollutants to levels that will not impact water quality.

The Discharger shall implement treatment control BMPs to protect water quality as follows:

a. Chlorine Residual

Chlorine is added to potable water and other potentially low threat wastewater for disinfection purposes. Chlorine is toxic to aquatic organisms. Therefore, all chlorinated discharges must be dechlorinated prior to discharge to protect the beneficial uses of the receiving water. The Discharger must achieve strict

levels that essentially ensure that there is no chlorine discharged to the receiving water.

b. Settleable and Suspended Solids

Sediment, algae and other solids may be present in the discharges at levels that could cause violation of the Basin Plan's narrative objectives for sediment, settleable material and suspended material. In addition, some treatment facilities occasionally discharge large volumes of water over a short period due to operation error or equipment or instrument malfunction. High flow rates may cause stream bank erosion and the discharge of a large amount of sediment downstream of the discharge. This General Permit requires the development of a site-specific BMP/PP Plan to avoid and/or minimize these impacts.

The Discharger must demonstrate that the discharge will not exceed the total suspended solids and settleable solids effluent limitations contained in the General Permit and further demonstrate that the proposed discharge will not cause an exceedance of turbidity receiving water limitations.

c. pH

Lime or sodium hydroxide is added to water to adjust water pH for corrosion protection in water conveyance systems. The discharge of water with high pH content may adversely impact aquatic organisms. The discharges shall have a balanced pH in order to prevent detrimental responses to aquatic organisms.

If there is any doubt about the ability to continuously comply with the requirements of this General Permit, the Discharger shall contact a professional engineer to ensure that the effluent is properly treated prior to discharge. Dischargers seeking authorization to discharge under this General Permit may be required to provide engineering blueprints (signed by a Registered Engineer or Geologist) of the existing or proposed treatment system to reduce any pollutants to levels that will meet the effluent limitations prior to discharging into surface waters.

8. Management Plans.

All applicants are required to develop and submit a Best Management Practices and Pollution Prevention Plan. Most dischargers must submit a Best Management Practices and Pollution Prevention Plan in accordance with Special Provision VII.C.3 of the General Permit that identifies management measures that will be implemented at the site to control the discharge of pollutants and

minimize impacts to water quality. Dischargers must consider and identify preventative, control, treatment and response BMPs that may be necessary. The BMP/PP Plan must include, at a minimum, the elements identified in Attachment A-1.

Special Provision VII.C.2.a allows water suppliers requesting coverage of multiple discharge points from a single project to prepare and implement a Pollution Prevention and Monitoring and Reporting Program (PPMRP) rather than identify and monitor each discharge, as required in sections IV and VIII of the Monitoring and Reporting Program (Attachment E). The PPMRP must be submitted with the Notice of Intent and is subject to approval by the Executive Officer. The PPMRP must include, at a minimum, the elements identified in Attachment A-2.

9. Current State Water Board Adopted Permit Fees. Information concerning the applicable fees can be found at <http://www.waterboards.ca.gov/resources/fees>
10. Project map(s), site drawing, and photographs. The project map(s) must include the location of the project, discharge point(s), and receiving water. The map shall also identify drinking water supply wells and residences within 1,500 feet and groundwater contamination sites within ½ mile of the proposed project site. The site drawing must identify BMPs and treatment systems, site runoff and conveyance systems, such as storm drains and drainage ditches through which the proposed discharge would travel. Photographs should be included to supplement site and receiving water characterization.

## **B. Regional Water Board Authorization.**

After reviewing the NOI, the Regional Water Board Executive Officer will notify each General Permit applicant in writing whether or not the proposed discharge is eligible for coverage under the General Permit and the Executive Officer's intent with regard to granting authorization to discharge. If the Executive Officer intends to authorize coverage, the proposed enrollment under the General Permit will be subject to a 30 day public notice period. At the end of the public notice period the Executive Officer will provide written notice to the General Permit applicant with a determination regarding coverage under the General Permit.

The Executive Officer may also elect to schedule a hearing at a Regional Water Board hearing if a proposed low threat discharge meets the eligibility criteria but is controversial and/or if any significant issues are raised during the public comment period.

In no case may a discharge occur until the applicant receives written notification of coverage under the General Permit or another permit issued or adopted by the State or Regional Water Board.



### **C. Eligibility Criteria.**

All dischargers must demonstrate that that proposed discharge meets the definition of low threat in section I.B.1 and the eligibility criteria in section I.C. of the General Permit.

## **III. DESCRIPTION OF LOW THREAT DISCHARGES AND EXISTING DISCHARGE REQUIREMENTS**

### **A. Description of Low Threat Discharges**

The General Permit is a permitting tool used by the Regional Water Board to efficiently authorize and regulate a large number of similar dischargers. Following a determination of suitability for coverage, the Regional Water Board can efficiently regulate a large number of “low threat” discharges with a General Permit, rather than individual permits, and thereby reduce its administrative burdens and establish planning, operational, monitoring, and reporting requirements which are appropriate for the similar nature of all authorized discharges.

As the term “low threat” suggests, discharges authorized by this General Permit are similar in that they each present a low threat to water quality and beneficial uses of receiving waters within the Region. Authorization to discharge under the General Permit will be granted at the discretion of the Regional Water Board Executive Officer following review of information provided by the Discharger in its Notice of Intent (NOI) regarding suitability of a particular discharge for coverage under the General Permit and following a 30-day public comment period. During the public notice period, Regional Water Board staff will also notify public agencies with various authorities that may be affected by the authorization of a low threat discharge. Public agencies that will be notified include, but are not limited to, local flood control agencies, municipal storm water agencies/permittees, California Department of Fish and Game, U.S. Fish and Wildlife Service, and National Marine Fisheries Service. Any concerns identified by any of these agencies would need to be mitigated in order for a proposed discharge to qualify as a low threat discharge.

The proposed General Permit will cover more types of low threat discharges than Order No. 93-61, but the Regional Water Board has the discretion to limit coverage only to discharges which clearly present no or minimal threat to water quality. In general, the Regional Water Board views low threat discharges as planned, short-term and/or low volume discharges from definable projects with discrete point source discharges where the discharge is controlled to eliminate or reduce pollutants and minimize volume and discharge rates through implementation of BMPs. Discharges that may receive authorization for coverage under this General Permit shall not contain pollutants in concentrations that exceed applicable water quality objectives or criteria and must be consistent with applicable State and federal antidegradation policies.

For inland surface waters, enclosed bays, and estuaries, applicable water quality objectives and criteria are established in:

1. Chapter 3 of the Basin Plan, which includes specific numeric criteria, as well as narrative objectives (e.g., no discharge of biostimulatory substances in concentrations that promote aquatic growths to an extent that causes nuisance or that adversely impacts beneficial uses).

For receiving waters that are designated as municipal and domestic supplies, the Basin Plan adopts by reference as applicable water quality criteria the Maximum Contaminant Levels (MCLs) for drinking water established by the California Department of Public Health at Title 22 of the California Code of Regulations, section 64431 (Inorganic Chemicals) and section 64444 (Organic Chemicals). For purposes of the General Permit these water quality criteria are assumed to be applicable to all inland waters, enclosed bays, and estuaries of the North Coast Region.

2. The Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan), which establishes water quality objectives for temperature in the coastal and interstate waters and enclosed bays and estuaries of the Region, and
3. The California Toxics Rule (CTR), which establishes specific water quality criteria for toxic pollutants in the receiving waters of the Region and is published at 40 CFR 131.38.

For ocean waters, applicable water quality objectives and criteria are established in the Thermal Plan and the Ocean Plan, which includes water quality objectives for the bacterial, physical, chemical, biological, and radiological characteristics of the ocean waters of the North Coast Region. Numeric water quality objectives for toxic pollutants are presented in Table B of the Ocean Plan.

While meeting applicable water quality objectives and criteria, low threat discharges must also not cause a violation of the State's antidegradation policy, which is established by State Water Board Resolution No. 68-16 and through the Regional Water Board's implementation of USEPA rules regarding antidegradation expressed at 40 CFR 131.12. Discussion of the Regional Water Board's antidegradation analysis performed to reissue the General Permit is presented in section V.F of this Fact Sheet.

Section I.B of this General Permit includes examples of discharges that may be eligible or ineligible for coverage under the General Permit. These lists should be viewed as guidance only, as the Regional Water Board will determine eligibility for coverage strictly on a case-by-case basis. It is important to note that, with some exceptions, if discharges proposed for authorization under the General Permit must receive anything more than simple, low-technology treatment to meet applicable water quality objectives or criteria, such discharges will not be authorized under the General Permit. In general, the Regional Water Board views a need for anything more than simple, low-technology treatment to meet water quality criteria and objectives as indication that a

discharge also requires the close attention of an individual discharge permit or other appropriate general permit. Although each discharge proposed for coverage under the General Permit will be considered on a case-by-case basis, following are several types of wastewater treatment systems that will likely not be precluded from coverage under the General Permit:

- Treatment to remove physical pollutants, such as settleable and suspended solids, turbidity, and excessive temperature from the wastewater;
- Treatment to remove chlorine from the wastewaters that originate from a chlorinated potable supply or wastewaters that receive treatment by chlorine;
- Treatment to make pH adjustments to fall within the range of 6.5 and 8.5 (or range specified for a specific waterbody identified in Attachment B-4.)

## **B. Discharge Points and Receiving Waters**

The discharge points and receiving water will be described in the Notice of Intent submitted by each discharger.

The Basin Plan and the Ocean Plan designate beneficial uses, establish water quality objectives and criteria, and contain implementation plans and policies to achieve those objectives and criteria for all waters of the North Coast Region. These plans identify specific beneficial uses for ground waters and surface waters, including ocean, coastal, and inland waters. Beneficial uses of inland waters specifically identified by the Basin Plan generally apply its tributary streams. The beneficial uses of all receiving waters within the North Coast Region are described in Findings H and I of the General Permit and section III.C of this Fact Sheet.

## **C. Summary of Existing Requirements, Order No. 93-61**

The previous General Permit (Order No. 93-61) authorized discharges of ground water associated with construction and subsurface dewatering activities, to surface waters of the North Coast Region. Like this new Order, Order No. 93-61 placed significant emphasis on determining suitability for coverage by evaluating whether a proposed discharge does, in fact, present a low threat to water quality and beneficial uses. Order No. 93-61 does not contain any effluent limitations. It contains discharge limitations (prohibitions) and receiving water limitations and most of these have been retained in this new Order. The exception is that Discharge Limitation D.1, which prohibits the discharge of groundwater containing constituents in excess of the background level in the receiving water, has not been retained. Section V.E of this Fact Sheet provides an anti-backsliding analysis for removal of this prohibition.

#### **IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

The requirements contained in this General Permit are based on the requirements and authorities described in this section. This section provides supplemental information, where appropriate, for the plans, policies, and regulations relevant to the discharges authorized by the General Permit.

##### **A. Legal Authorities**

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for low threat, point source discharges to surface waters of the North Coast Region. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

##### **B. California Environmental Quality Act (CEQA)**

Pursuant to California Water Code section 13389, the action by the Regional Water Board to adopt Waste Discharge/NPDES Requirements does not trigger the requirements of CEQA, Public Resources Code sections 21100-21177, except Waste Discharge/NPDES Requirements for “new sources,” as defined by the Clean Water Act. NPDES regulations at 40 CFR 122.2 define “new source” as any building, structure, or facility, from which the discharge of pollutants may occur, that was built after the promulgation of applicable Effluent Limitations Guidelines. Because this Order precludes from coverage any discharge that is subject to Effluent Limitations Guidelines promulgated pursuant to CWA section 306, “new sources,” as contemplated by the CWA, will not be eligible for coverage, and therefore, the action by the Regional Water Board to adopt Waste Discharge/NPDES Requirements with this Order does not trigger the requirements of CEQA.

##### **C. State and Federal Regulations, Policies, and Plans**

**1. Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan for the North Coast Region* (the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Plan. The Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. In addition, the Basin Plan (Chapter 2) states that the beneficial uses of any water body, specifically identified in the Basin Plan, generally apply to its tributary streams. Beneficial uses, established by the Basin Plan for inland surface waters and coastal waters of the North Coast Region are summarized as follows:

- Municipal and Domestic Supply (MUN)
- Agricultural Supply (AGR)
- Industrial Service Supply (IND)
- Industrial Process Supply (PRO)
- Groundwater Recharge (GWR)
- Freshwater Replenishment (FRSH)
- Navigation (NAV)
- Hydropower Generation (POW)
- Water Contact Recreation (REC-1)
- Non-Contact Water Recreation (REC-2)
- Commercial and Sport Fishing (COMM)
- Aquaculture (AQUA)
- Warm Freshwater Habitat (WARM)
- Cold Freshwater Habitat (COLD)
- Inland Saline Water Habitat (SAL)
- Estuarine Habitat (EST)
- Marine Habitat (MAR)
- Wildlife Habitat (WILD)
- Preservation of Areas of Special Biological Significance (ASBS)
- Rare, Threatened, or Endangered Species (RARE)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Shellfish Harvesting (SHELL)
- Water Quality Enhancement (WQE)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Wetland Habitat (WET)
- Native American Culture (CUL)
- Subsistence Fishing (FISH)

Requirements of this Order protect beneficial uses by implementing water quality objectives, which are designed to protect such uses.

The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal and interstate waters and enclosed bays and estuaries. Requirements of this Order implement the Thermal Plan.

The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978,

1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the Ocean. The Ocean Plan requires that the following beneficial uses of ocean waters of the State be protected:

- Industrial Water Supply)
- Water Contact and Non-contact Recreation, Including Aesthetic Enjoyment
- Navigation
- Commercial and Sport Fishing
- Mariculture
- Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS)
- Protection of Rare and Endangered Species
- Marine Habitat
- Fish Migration
- Fish Spawning and Shellfish Harvesting

In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants and are applicable to discharges to inland surface waters, estuaries and enclosed bays.
3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

- 4. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- 5. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and Resolution No. 68-16. As discussed in detail in section V.F of this Fact Sheet, the discharge is consistent with the antidegradation provisions of section 131.12 and State Water Board Resolution No. 68-16.
- 6. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations<sup>1</sup> section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions when limitations may be relaxed. As described by section V.E of this Fact Sheet, the Regional Water Board has determined that the General Permit is consistent with applicable anti-backsliding requirements established by the CWA and by USEPA regulations at 40 CFR 122.44 (l).

#### **D. Impaired Water Bodies on CWA 303(d) List**

An impaired or threatened waterbody is any waterbody that is listed according to section 303(d) of the Clean Water Act as not attaining water quality standards<sup>2</sup>. Standards may be violated due to an individual pollutant, multiple pollutants, thermal pollution, or an unknown cause of impairment. If a Discharger is proposing to discharge into a water quality limited segment of a waterbody, the Discharger must provide a wastewater analysis of the 303(d) listed constituents of concern as part of the Notice of Intent.

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<sup>1</sup> All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

<sup>2</sup> Water quality standards are adopted to protect public health or welfare, enhance the quality of water, and serve the purposes of the Clean Water Act (as defined in Sections 101(a)(2), and 303(c) of the Act). Water quality standards consist of 1) designated beneficial uses; 2) the water quality objectives to protect those designated uses; 3) implementation of the Federal and State policies for antidegradation; and 4) general policies for application and implementation.

In determining suitability for coverage under the General Permit, the 303 (d) status of the receiving water for a proposed discharge, as well as any total maximum daily loads (TMDLs) established in response to 303 (d) listing, will be considered by Regional Water Board staff. Dischargers will be required to seek coverage under an individual permit, if the discharge could cause further degradation to a 303 (d) listed water body, or if the discharge would be inconsistent with a TMDL.

## **E. Other Plans, Policies and Regulations**

### **1. General NPDES Permits**

On September 22, 1989, a Memorandum of Agreement executed by the U.S. EPA and State Water Board authorized and established procedures for the State Water Board to issue general NPDES permits pursuant to NPDES regulations at 40 CFR 122.28 and 122.44.

NPDES regulations at 40 CFR 122.28 provide for the issuance of general NPDES permits to regulate a category of point sources, which:

- a. Involve the same or substantially similar types of operations;
- b. Discharge the same type of wastes;
- c. Require the same type of effluent limitations or operations conditions;
- d. Require similar monitoring; and,
- e. Are more appropriate regulations under a General Permit rather than individual permits.

Water Code Section 13263 (i) authorizes the Regional Board to prescribe general waste discharge requirements for a category of discharges, which:

- a. Are produced by the same or similar operations;
- b. Involve the same or similar types of waste;
- c. Require the same or similar treatment standards; and,
- d. Are more appropriately regulated under general discharge requirements.

This General Permit meets these requirements in that the discharges that could potentially enroll under this General Permit are all de minimus discharges that are high quality, relatively pollutant-free wastewaters that pose a low threat to water quality. These discharges are most typically produced by water suppliers and construction-related operations. Many activities that result in low threat discharges



are vital to community development activities, such as construction and provision of reliable water supply and often there is no practical alternative to surface water discharge. The wastes are similar in that they are relatively pollutant-free and the pollutants that are typically present are generally naturally occurring parameters such as naturally occurring metals and salts, sediment, temperature, and pH. Many of the discharges could also contain chlorine and chlorine by-products that originate from disinfection. The discharges all require similar treatment ranging from no treatment to simple, low technology treatment. Regulating such discharges under a general permit rather than issuing individual permits allows the Regional Water Board to more efficiently permit these similar types of discharges.

## **V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

### **A. Discharge Prohibitions**

1. Prohibition III. A. The discharge of waste, other than those that meet the eligibility criteria in Section I.B and II.C of this Order is prohibited unless the Discharger obtains coverage under another general or individual permit that regulates the discharge of such wastes.

NPDES regulations at 40 CFR 122.28 and Water Code section 13263 (i) authorize the issuance of general NPDES permits and general waste discharge requirements to regulate a category of point sources, which involve the same or substantially similar types of operations; discharge the same type of wastes; require the same type of effluent limitations or operating conditions; require similar monitoring; and are more appropriately regulated under a general permit than individual permits.

The advantage to the Regional Water Board in issuing a general permit is that a group of similar dischargers can be regulated by one permit, instead of with individual permits, thereby reducing some administrative burden. Before authorization to discharge under the General Permit can be granted, however, the Regional Water Board must be assured that all authorized dischargers have similarities required by the NPDES regulations and the Water Code. By this prohibition, the Regional Water Board is therefore prohibiting discharges which are

not “low threat” as represented by the Discharger in its NOI or as contemplated by the Regional Water Board.

2. Prohibition III. B. The creation of pollution, contamination, or nuisance, as defined by section 13050 of the California Water Code, is prohibited.

This prohibition is based on section 13050 of the Water Code. It has been retained from Order No.93-61.

3. Prohibition III.C. A low threat discharge in excess of the flow rate described by a discharger in its NOI is prohibited.

Authorization to discharge under the General Permit will be granted by the Regional Water Board only following its determination that a discharge is truly “low threat,” as that term is described and contemplated by the General Permit. Significant factors to be weighed in making such a determination are the volume and rate of discharge. Discharge rates or volumes greater than what are described by a discharger in its NOI or approved by the Regional Water Board may have significant adverse impacts to receiving waters, and therefore, such discharges will be viewed as unauthorized discharges and may subject the discharger to all available and appropriate penalties pursuant to the Water Code and the Clean Water Act.

4. Prohibition III.D. Discharges containing pollutants that exceed applicable water quality criteria or objectives, or that cause or substantially contribute to exceedances of applicable water quality criteria or objectives established by the Basin Plan, Ocean Plan, or Clean Water Act for surface waters are prohibited.

Discharges which contain pollutants at concentrations exceeding applicable water quality criteria and objectives, including any waterbody-specific TMDL, may cause or contribute to violations of water quality standards, and therefore, cannot be viewed as “low threat.” Such discharges are precluded from coverage under the General Permit. If, following authorization, a discharge is found to contain pollutants at concentrations exceeding applicable water quality criteria or objectives, such a discharge will be viewed as an unauthorized discharge, and, as such, the discharger will be subject to all available and appropriate penalties pursuant to the Water Code and the Clean Water Act and the discharge will be required to cease.

5. Prohibition III.E. The discharge of polluted groundwater to waters of the State is prohibited.

Projects that involve the discharge of groundwater have the potential to contain naturally occurring constituents that exceed applicable water quality objectives (e.g., naturogenic arsenic) or to draw in groundwater that has been contaminated by human activities. Such projects will not receive authorization for coverage under this

General Permit. The NOI requires identification of known groundwater contamination sites within a one half-mile radius of the project site.

6. Prohibition III.F. The discharge from the treatment facility at construction dewatering sites or other similar low-threat discharges of detectable levels of petroleum, petroleum constituents or volatile halogenated compounds is prohibited.

This prohibition is retained from Order No. 93-61.

7. Prohibition III.G. The discharge of domestic, and/or agricultural, and/or commercial and/or industrial process wastes are prohibited.

Wastewaters with any domestic, agricultural, commercial, or industrial waste component are not considered “low threat” wastewaters and therefore must be authorized and regulated by an individual discharge permit.

8. Prohibition III.H. The discharge of an effluent with constituents in excess of applicable limits required by any watershed-specific TMDL, is prohibited.

Wastewaters that contain constituents in excess of applicable limits required by a TMDL are not considered low threat wastewaters and therefore must be authorized and regulated by an individual discharge permit.

9. Prohibition III.I. The contact of low threat discharges with contaminated soil or groundwater is prohibited.

If a low threat wastewater comes in contact with contaminated soil or groundwater, the discharge would likely entrain pollutants that are not authorized under this General Permit and would no longer qualify as a low threat discharge.

10. Prohibition III.J. The discharge of low threat wastewater effluent to surface waters is prohibited during the period of May 15 through September 30 of each year in the Mad, Russian and Eel Rivers and their tributaries and year round in all other surface waters, unless the Regional Water Board Executive Officer grants an exception to this seasonal discharge prohibition.

This prohibition is required by the Basin Plan. The Basin Plan prohibits discharges to the Mad, Eel and Russian Rivers and their tributaries during the period May 15 through September 30 (Chapter 4, North Coastal Basin Discharge Prohibition No. 4) and year-round in all other surface waters of the North Coast Region. The original intent of this prohibition was to prevent the contribution of wastewater to the baseline flow of the Russian River during the period of the year when the Russian River and its tributaries experience the heaviest water-contact recreation use.

If the Regional Water Board adopts the *Basin Plan Amendment to Establish Exception Criteria to the Point Source Waste Discharge Prohibitions by Revising the*

*Action Plan for Storm Water Discharges and Adding a New Action Plan for Low Threat Discharges*, and the amendment is subsequently approved by the State Water Board Office of Administrative Law and the U.S. EPA, the Regional Water Board Executive Officer will have the authority to grant exceptions to the year-round and seasonal discharge prohibitions on a case-by-case basis after review of a discharger's NOI that has made a proper demonstration that all other discharge alternatives have been exhausted and that a discharge to surface waters during the seasonal discharge prohibition period is in compliance with the requirements of the General Permit.

11. During the period of October 1 through May 14, discharges of treated wastewater to the Mad, Eel, or Russian River or tributaries thereto shall not exceed one percent of the receiving water flow, unless the Regional Water Board Executive Officer grants an exception to this discharge flow limitation. Discharges of treated wastewater to surface waters are prohibited year-round to all other waterbodies in the North Coast Region, unless the Regional Water Board Executive Officer grants an exception to the year-round discharge prohibition.

These discharge flow limitations are required by the Basin Plan. The original intent of these flow limitations was to protect the water supply and contact recreation beneficial uses with respect to municipal wastewater discharges. Low threat wastewaters pose a much lower threat to water quality and will not threaten the municipal or contact recreation beneficial uses.

If the Regional Water Board adopts the *Basin Plan Amendment to Establish Exception Criteria to the Point Source Waste Discharge Prohibitions by Revising the Action Plan for Storm Water Discharges and Adding a New Action Plan for Low Threat Discharges*, and the amendment is subsequently approved by the State Water Board Office of Administrative Law and the U.S. EPA, the Regional Water Board Executive Officer will have the authority to grant exceptions to the discharge flow limitation on a case-by-case basis after review of a discharger's NOI that has made a proper demonstration that the discharge volume and flow rate is minimized to the extent practicable through the use of other discharge alternatives and that the discharge greater than one percent of the receiving water flow does not pose a threat to beneficial uses.

## **B. Technology-Based Effluent Limitations**

### **1. Scope and Authority**

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards.

Where the USEPA has not developed technology-based standards for a particular industry or a particular pollutant, the CWA section 402(a)(1) and 40 CFR section 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where effluent limit guidelines (ELGs) are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR section 125.3(d). This General Permit requires the use of BMPs to control and abate the discharge of pollutants to surface waters and to achieve compliance with Best Available Technology Economically Achievable (BAT)/Best Conventional Pollutant Control Technology (BCT) requirements and compliance with Basin Plan water quality objectives. Discharges enrolled under this Order are expected to comply with all water quality objectives with implementation of BMPs.

Technologies used for treatment of low threat wastewater include simple measures such as settling, dechlorination, and pH and temperature adjustment. These technologies are readily available and represent accepted standards of treatment for the categories of discharges that may be authorized under this General Permit. The cost of application of these technologies in relation to the effluent reduction benefits to be achieved from the application have been considered and determined to be reasonable. Non-water quality environmental impacts have been considered and mitigation measures have been identified in section VII.C.6.b of the General Permit. All other CFR section 125.3(d) factors are not directly applicable to low threat discharges due to the facts that these are generally short-term and temporary discharges.

## **2. Applicable Technology-Based Effluent Limitations**

The General Permit will authorize numerous types of high quality discharges that are relatively pollutant-free and pose a low threat to water quality and beneficial uses of receiving waters. The primary mechanism for regulating/controlling such discharges will be through the development and implementation of a Best Management Practices (BMP)/Pollution Prevention (PP) Plan by each authorized discharger, as required by sections VII.C.2.a and VII. C. 3 of the Order.

NPDES regulations at 40 CFR 122.44 (k) allow the use of BMPs to take the place of numeric limitations in discharge permits under certain circumstances, including when numeric effluent limitations are infeasible. In these circumstances, discharges which contain pollutants at concentrations greater than applicable water quality objectives and criteria will be precluded from coverage under the General Permit. Pollutants of concern are therefore difficult to anticipate for each type of possible discharge; and it is therefore similarly infeasible to establish numeric effluent limitations to regulate/control each type of possible discharge authorized by the General Permit. In the General Permit, Regional Water Board staff view the thoughtful and effective implementation of BMPs as implementation of technology-based requirements and, with the prohibition of discharges that contain pollutants at concentrations greater

than applicable water quality standards, as the means to assure protection of water quality standards. In particular, BMPs will be directed to control “physical” pollutants such as settleable and suspended solids and turbidity.

## **C. Water Quality-Based Effluent Limitations (WQBELs)**

### **1. Scope and Authority**

Section 301 (b) of the CWA and NPDES regulations at 40 CFR 122.44 (d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards, including numeric and narrative objectives within a standard.

40 CFR 122.44 (d) (1) (i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state’s narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

### **2. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

- a. **Beneficial Uses.** Low threat discharges may potentially be authorized to discharge to all surface waters of the North Coast Region. Beneficial uses for receiving waters of the North Coast region are established by the Basin Plan and Ocean Plan and are discussed in detail in section III.C of this Fact Sheet.
- b. **Basin Plan Water Quality Objectives.** The Basin Plan contains narrative objectives for color, tastes and odors, floating material, suspended material, settleable material, oil and grease, biostimulatory substances, sediment, turbidity, pH, dissolved oxygen, bacteria, temperature, toxicity, pesticides, chemical constituents, and radioactivity that apply to inland surface waters, enclosed bays, and estuaries and coastal waters. For waters designated for use as domestic or municipal supply (MUN), the Basin Plan establishes as applicable water quality

criteria the Maximum Contaminant Levels (MCLs) established by the Department of Public Health for the protection of public water supplies at title 22 of the California Code of Regulations section 64431 (Inorganic Chemicals) and section 64444 (Organic Chemicals).

- c. Ocean Plan Water Quality Objectives. The Ocean Plan contains water quality objectives applicable to coastal waters and include water quality objectives for toxic pollutants established in Table B of the Ocean Plan.
- d. State Implementation Plan (SIP), CTR and NTR. Water quality criteria and objectives applicable to this receiving water are established by the California Toxics Rule (CTR), established by the UPEPA at 40 CFR 131.38; and the National Toxics Rule (NTR), established by the USEPA at 40 CFR 131.36. Criteria for most of the 126 priority pollutants are contained within the CTR and the NTR.

This General Permit does not authorize discharges that have the reasonable potential to exceed water quality objectives. This Order requires the Discharger to analyze the proposed effluent for priority pollutants and hardness and analyze the upstream receiving water for hardness and submit the analytical results with the Notice of Intent.

Due to the uncertainty of the various types of discharge conditions that could be covered under this General Permit, and in order to ensure the protection of water quality for all discharge conditions, the reasonable potential analysis must be conducted using a reasonable worst-case condition in order to protect beneficial uses for all discharge conditions. Depending on receiving water conditions, use of either the lowest observed effluent hardness or the lowest observed receiving water hardness may be more protective of aquatic life beneficial uses. For example, under effluent dominated discharge conditions, use of the lowest observed effluent hardness is the most protective.

This General Permit, Attachment B-2 includes screening levels for cadmium, chromium (III), copper, lead, nickel, silver, and zinc which are dependent on water hardness. The CTR expresses the objectives for these metals through equations where the hardness of the receiving water is a variable. To simplify the permitting process, it was necessary that fixed hardness values be used in these equations. To calculate screening levels for waters with hardness concentrations less than 50 mg/L, a hardness value of 25 mg/L was used. To calculate screening levels for water with hardness concentrations greater than or equal to 50 mg/L, but less than 100 mg/L, a hardness value of 75 mg/L was used. To calculate screening levels for water with hardness concentrations greater than or equal to 100 mg/L but less than 200 mg/L, a hardness level of 150 mg/L was used, and to calculate screening levels for waters with hardness concentrations greater than or equal to 200 mg/L, a hardness value of 200 mg/L was used.

### 3. Determining the Need for WQBELs

- a. CWA section 301 (b)(1) requires NPDES permits to include effluent limitations that achieve technology-based standards and any more stringent limitations necessary to meet water quality standards. Water quality standards include Regional Water Board Basin Plan beneficial uses and narrative and numeric water quality objectives, State Water Board-adopted standards, and federal standards, including the CTR and NTR. The Basin Plans include numeric site-specific water quality objectives and narrative objectives for toxicity, chemical constituents, and tastes and odors. The narrative toxicity objective states: “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.” With regards to the narrative chemical constituents objective, the Basin Plans state that waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. At minimum, “...water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs)” in Title 22 of CCR. The narrative tastes and odors objective states: “Water shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to domestic or municipal water supplies or to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses.”
- b. Federal regulations require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numerical water quality standard.
- c. This Order requires Dischargers seeking authorization to discharge under this General Permit to provide analysis of the proposed effluent and demonstrate that the discharge does not pose reasonable potential to exceed any water quality objective. Although the SIP applies directly to the control of CTR priority pollutants, the State Water Board has held that the Regional Water Board may use the SIP as guidance for water quality-based toxics control.<sup>3</sup> The SIP states in the introduction “The goal of this Policy is to establish a standardized approach for permitting discharges of toxic pollutants to non-ocean surface waters in a manner that promotes statewide consistency.” Therefore, in this Order the RPA procedures from the SIP were used to evaluate reasonable potential for both CTR and non-CTR constituents.

Prior to enrolling a discharger under this General Permit, Regional Water Board staff shall conduct an RPA in accordance with section 1.3, Step 7 of the SIP by

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<sup>3</sup> See Order WQO 2001-16 (Napa) and Order WQO 2004-0013 (Yuba City).



comparing the results to the screening criteria contained in Attachment B and Attachment C (if applicable) to determine reasonable potential. If reasonable potential is found for a proposed discharge to exceed or cause an exceedance of any water quality objective in Attachments B or C, the discharge will not be authorized under this General Permit, as this General Permit does not contain effluent limitations for any of the pollutants identified in Attachments B and C.

#### 4. WQBELs for Low Threat Discharges

##### a. Inland Surface Waters.

##### i. Total Residual Chlorine.

Many low threat discharges will likely originate from potable water supplies (e.g., hydrostatic test waters, etc.) and other discharges that may contain chlorine. Chlorine is extremely toxic to aquatic organisms. Due to the potential for chlorine to be discharged, these discharges have a reasonable potential to cause or contribute to an in-stream excursion above the Basin Plan's narrative toxicity objective which states, "[a]ll waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." In order to protect the beneficial uses of the receiving water, this Order includes an effluent limitation for total residual chlorine for any discharge of water that was chlorinated that requires no detectable levels of chlorine in the discharge.

Regional Water Board staff consider any chlorinated discharge as having the reasonable potential to cause or contribute to exceedances of this water quality objective for toxicity, and therefore, this Order establishes specific effluent limitations for chlorine. USEPA has established the following criteria for chlorine-produced oxidants for protection of fresh water aquatic life. [Quality Criteria for Water 1986 (The Gold Book, 1986, EPA 440/5/-86-001)]

| Chronic Criteria | Acute Criteria |
|------------------|----------------|
| 0.011 mg/L       | 0.019 mg/L     |

The USEPA *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001) contains statistical methods for converting chronic (4-day) and acute (1-hour) aquatic life criteria to average monthly and maximum daily effluent limitations based on the variability of the existing data and the expected frequency of monitoring. Because projects that would be granted coverage under this General Permit are typically short in duration, reasonable potential exists for acute toxicity over short periods of time and an average 1-hour limitation is considered more appropriate than an average

daily limitation. Average 1-hour and 4-day effluent limitations for chlorine, based on these criteria, are included in this Order.

- ii. **Settleable Solids.** For inland surface waters, the Basin Plan states that “[w]ater shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.” Settleable solids are a constituent of concern in low threat discharges and are a component of sediment. Many water bodies in the North Coast Region are on the CWA 303(d) list for sediment. The General Permit establishes an effluent limitation for settleable solids of < 0.1 mL/L based on protection of the narrative settleable solids objective.
- iii. **pH.** The effluent limitations for pH are specific to the receiving water and are based on the water quality objectives for pH established in Chapter 3 and identified in Table 3-1 of the Basin Plan.

For waters not listed in Table 3-1 of the Basin Plan (included as Attachment B-4 of the General Permit) and where pH objectives are not otherwise prescribed, the General Permit requires that the pH of the discharge be not less than 6.5 nor greater than 8.5, based on the general pH water quality objective specified in Chapter 3 of the Basin Plan.

- iv. **Total Dissolved Solids.** For waters listed in Attachment B-4 (Table 3-1 from the Basin Plan), the total dissolved solids water quality objectives in Attachment B-4 shall apply as effluent limitations.

This effluent limitation is based on water quality objectives for specific waterbodies identified in Table 3-1 of the Basin Plan.

- v. **Priority Pollutants.** This General Permit is not intended to regulate discharges that have the reasonable potential to exceed water quality objectives; such discharges would be more appropriately regulated by an individual order. Since this is a general order for all low threat discharges to surface waters in the North Coast Region of California, this General Permit establishes screening levels in Attachment B, Tables B-1 and B-2 that are protective of beneficial uses under all discharge conditions and are based on the most protective water quality criteria for priority pollutants from the California Toxics Rule. Dischargers enrolling under this Order are required to analyze the proposed discharge for constituents regulated under the CTR and submit the results as part of the Notice of Intent. If the analytical data demonstrate that any constituent concentrations in the discharge exceed the water quality screening levels listed in Attachment B, the discharge will not be allowed under this General Permit. If all constituent concentrations are below the screening levels listed in Attachment B, the discharge may be authorized for

coverage under this General Permit, provided that all of the eligibility criteria and enrollment requirements are met.

b. Ocean Waters

i. Total Residual Chlorine.

The Ocean Plan establishes the following water quality criteria for chlorine in ocean waters of the State.

| 6-Month Median | Daily Maximum |
|----------------|---------------|
| 0.002 mg/L     | 0.008 mg/L    |

The water quality criteria recommended by USEPA and established by the Ocean Plan are, in effect, nondetectable concentrations by the common amperometric analytical method used for the measurement of chlorine; and therefore, the Regional Water Board is establishing an effluent limitation for chlorine in the General Permit that requires no detectable level of chlorine in authorized discharges.

ii. Total Suspended Solids.

Total suspended solids effluent limitations for ocean waters are from Section III.B (Table A) of the Ocean Plan.

The Ocean Plan establishes a maximum effluent limitation of 60 mg/L, not to be exceeded at any time. The Ocean Plan further states "Dischargers shall, as a 30-day average, remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/L."

iii. Settleable Solids.

Settleable solids effluent limitations for ocean waters are from Section III.B (Table A) of the Ocean Plan.

iv. Turbidity

Turbidity effluent limitations for ocean waters are from Section III.B (Table A) of the Ocean Plan.

v. Grease and Oil.

Grease and Oil effluent limitations for ocean waters are from Section III.B (Table A) of the Ocean Plan.

vi. pH.

Effluent limitations for pH for ocean waters are from Section III.B (Table A) of the Ocean Plan.

#### **D. Final Effluent Limitations**

Final effluent limitations are established in section V.A of the General Permit and are summarized in sections B.2 and C.4, above in this Fact Sheet.

#### **E. Satisfaction of Anti-Backsliding Requirements**

All effluent limitations and restrictions in this Order are at least as stringent as those established by the previous General Permit, Order No. 93-61, with one exception. Order No. 93-61 included the following discharge limitation which is not being retained in the reissued General Permit.

*Discharge Limitation D.1. The discharge of groundwater containing constituents in excess of the background level in the receiving water is prohibited.*

Discharge Limitation D.1 from the previous permit has been replaced with a prohibition against discharges containing constituents in concentrations higher than applicable water quality criteria and objectives (Discharge Prohibition IV.B of this Order). The need for this change is that Discharge Limitation D.1 from the previous permit has been found to be too prohibitive and not justified in order to protect water quality and beneficial uses. There may be situations where a discharge contains very low levels of a constituent and meets water quality objectives, but the receiving water does not contain any background levels of that constituent, and so the discharge is prohibited. A common example is naturally occurring metals in groundwater. Even though the levels of these metals meet water quality objectives, Discharge Limitation D.1 in Order No. 93-61 would prohibit such a discharge. The Regional Water Board has concluded that such a prohibition is overly restrictive and not necessary to protect water quality. Although this would result in the Regional Water Board being able to allow discharges that exceed background levels, as long as the discharge meets water quality objectives, the Regional Water Board may require a discharger to add reasonable and cost-effective BMPs to reduce pollutant levels down to the background levels of the receiving water for any naturally occurring constituent.

Where a permit contains a less stringent effluent limitation than in the previous permit, CWA section 402(o) requires compliance with CWA 303(d)(4). Where the water quality meets or exceeds the applicable water quality standard for that constituent, section 303(d)(4) allows the effluent limitation to be revised only if it is consistent with the anti-degradation policy. As explained below, this permit satisfies the requirements of the federal and state antidegradation policies.

## **F. Satisfaction of Antidegradation Policy**

The Regional Water Board has determined that discharges authorized under the General Permit will be consistent with applicable antidegradation requirements of State Water Board Resolution No. 68-16, as well as USEPA policy established at 40 CFR 131.12. These provisions require that, at a minimum, existing instream water uses and the level of water quality necessary to protect those existing uses must be maintained. Where the existing water quality is better than the water quality objectives set to protect existing and potential beneficial uses, that quality must be maintained, unless specific findings are made. The federal antidegradation policy also requires that high quality waters that constitute an outstanding National resource must be maintained and protected<sup>4</sup>.

Because the proposed update to General Permit, Order No. 93-61 will apply to a broader range of low threat discharges, there will arguably be an increase in waste allowed to discharge to surface waters in the Region. There are, however, a number of additional requirements within this General Permit that will be implemented to ensure that not only are water quality objectives met, but existing water quality is protected to the greatest extent possible. For example, this General Permit requires characterization of the discharge and the receiving water, a certification that no pollutants will be discharged at levels that exceed water quality objectives, an evaluation of feasible alternatives to the discharge, and a description of treatment measures and BMPs that will be implemented to remove pollutants and minimize the rate, volume, and duration of the discharge. These requirements will help ensure that low threat discharges will protect the existing quality of water where that quality exceeds the objectives set forth in the Basin Plan and State Board plans and policies adopted for the protection of water quality, and will at a minimum, maintain water quality to protect existing beneficial uses, and will not impede recovery of those waterways that are not meeting all water quality objectives. Nonetheless, because of the potential for increased numbers of discharges to North Coast streams under the this General Permit, the Regional Water Board has considered the requirements of the federal and state anti-degradation policies.

Under the federal anti-degradation policy, existing instream water uses and the level of water quality necessary to protect existing uses must be maintained and protected. Where, however, the quality of the water exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and out of the water, that quality must be maintained and protected unless the State finds, after ensuring public participation, that:

1. Such activity is necessary to accommodate important economic or social development in the area in which the waters are located,
2. Water quality is adequate to protect existing beneficial uses fully, and

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<sup>4</sup> No waterbodies within the North Coast Region have been formally designated as outstanding national resources waters.

3. The highest statutory and regulatory requirements for all new and existing point source discharges and all cost-effective and reasonable best management practices for non point source control are achieved. (40 CFR 131.12.)

The federal policy also requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board actually established California's antidegradation policy in State Water Board Resolution No. 68-16 (Resolution) prior to the adoption of the federal policy. The Resolution incorporates the federal antidegradation policy and requires that existing quality of waters be maintained unless degradation is justified based on specific findings.

California's antidegradation policy is also included in the North Coast Basin Plan as a General Objective (Basin Plan pages 3-2.00 to 3-3.00).

California's antidegradation Policy applies to both groundwater and surface waters whose quality meets or exceeds (are better than) water quality objectives. The State policy establishes several conditions that must be met before the quality of high quality waters may be lowered by waste discharges.

The State must determine that lowering the quality of high quality waters:

1. Will be consistent with the maximum benefit to the people of the state;
2. Will not unreasonably affect present and anticipated beneficial uses of such water; and
3. Will not result in water quality less than that prescribed in state policies (e.g., water quality objectives).
4. In addition, before any degradation of water quality is permitted, it must be shown that the discharge will be required to meet waste discharge requirements that result in best practicable treatment or control of the discharge necessary to assure that:
  - a. Pollution or nuisance will not occur; and
  - b. The highest water quality consistent with maximum benefit to the people of the State is maintained.

Only those discharges that do not exceed Basin Plan water quality objectives or criteria, the California Toxics Rule objectives, or any other applicable Regional Water Board, State Water Board, or federal objective or criteria promulgated to protect water quality and beneficial uses are eligible to enroll under the this General Permit. Where a low threat discharge meets water quality objectives, it would not be expected to adversely affect the present or future beneficial use of surface waters, nor would it be expected to result in water quality less than that prescribed in the Basin Plan.

There may, however, be the potential for a small reduction in water quality from multiple low threat discharges cumulatively affecting water quality or where a discharge would be allowed that met water quality objectives, but exceeded background levels of the receiving water. The minor impact on water quality is, however, outweighed by the benefit of these low threat discharges, which are necessary to accommodate important economic or social development in the North Coast Region. Any such potential change in water quality is, therefore, consistent with the maximum benefit to the people of California. All of the potentially low threat discharges identified in Table 1 of the Order are associated with activities vital to communities. Activities such as construction dewatering, well development, and pipeline and reservoir maintenance that may produce discharges have been identified as having a potentially low threat to water quality, and serve important economic and social interests.

In order to enroll under this General Permit, each discharger will be required to implement BMPs and treatment, as necessary, to ensure that the discharge will not adversely affect beneficial uses of the receiving water and will comply with all applicable water quality objectives. Such BMPs could include BMPs designed to prevent, reduce or eliminate the generation of pollutants and waste; BMPs designed to control or manage pollutants and waste after they are generated, but before they come into contact with receiving water; BMPs designed to remove pollutants and waste from water prior to discharge; and BMPs intended to respond to leaks, spills and other releases with containment, control, and cleanup measures to prevent or minimize the potential for the discharge of pollutants and to minimize the adverse effects of such discharges. The BMPs identified by the discharger will be submitted as part of the Notice of Intent (NOI) for enrollment under this General Permit, and will be available for public review during the 30-day comment period on the proposed enrollment. This General Permit requires that the BMP/PP Plan include, at a minimum, the elements identified in Attachment A-1. The implementation of these measures will ensure the discharge is meeting the best practicable treatment or control of the discharge necessary to assure that the discharge will not cause pollution or nuisance, and result in the highest water quality consistent with maximum benefit to the people of the State.

## **G. Stringency of Requirements for Individual Pollutants**

This Order contains water quality-based effluent limitations for individual pollutants that implement water quality objectives and criteria contained in the Basin Plan. This Order also requires each applicant to screen its proposed discharge and demonstrate that no pollutant is present in the discharge at levels that exceed applicable federal or state water quality objectives including CTR and NTR objectives and MCLs established by the State Department of Public Health.

The General Permit also requires each discharger to develop and implement an approved BMP/PP Plan to regulate and control the low threat discharge to minimize the volume, discharge rate and duration of the discharge and to ensure that the discharge

does not cause erosion, scouring, adverse impacts to aquatic life or any other adverse impact.

The requirements established by the General Permit are no more stringent than necessary to implement the mandates of the CWA.

#### **H. Interim Effluent Limitations**

This General Permit does not include interim effluent limitations.

#### **I. Land Discharge Specifications**

The General Permit is not applicable to discharges that are solely to land. Discharges that are solely to land may separately require waste discharge requirements or a waiver of waste discharge requirements.

Land discharge is a means by which a discharger enrolled under this General Permit may reduce the volume and duration of discharge to surface waters. Such a discharge shall comply with the following general land discharge specification:

1. Land discharges shall not cause the creation of pollution or nuisance conditions.

Land discharges that a discharger may elect to use as a manner of reducing the flow rate and volume of low threat wastewater discharged to surface waters may include, but are not limited to, spray or overland flow disposal, percolation trenches or basins, evaporation trenches or basins, subsurface infiltration, or other similar disposal methods. The NOI must describe how any proposed land disposal method will be implemented so that it does not create pollution or nuisance conditions, including but not limited to erosion, localized flooding, breeding of insects or other vectors of health significance, or the discharge of fertilizers, herbicides, pesticides, salts, nutrients or any other pollutant of concern to surface or groundwater.

#### **J. Reclamation Specifications**

Reclamation specifications are not applicable to low threat discharges.

The General Permit is not applicable to discharges that are solely reclamation uses of wastewater. Discharges that are solely to reclamation uses may separately require waste discharge requirements or a waiver of waste discharge requirements.

### **VI. RATIONALE FOR RECEIVING WATER LIMITATIONS**

#### **A. Surface Water**

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the North Coast Region. Water quality objectives include an



objective to maintain high quality waters pursuant to federal regulations (40 CFR 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this General Permit are retained from the previous permit (Order No. 93-61) but have been supplemented, modified and updated to reflect all applicable water quality objectives of the most currently amended versions of the Basin Plan, Ocean Plan and Thermal Plan.

Receiving water quality is a result of many factors, some unrelated to the discharges which will be authorized by the General Permit. This Order considers these factors and is designed to minimize the influence of low threat discharges on the receiving waters of the North Coast Region.

## **B. Groundwater**

Receiving water limitations for groundwater established by the General Permit reflect the objectives established by the Basin Plan for the protection of the beneficial uses of groundwater of the North Coast Region.

## **VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

### **A. Influent Monitoring**

Influent monitoring requirements are not established by the General Permit.

### **B. Effluent Monitoring**

The Monitoring and Reporting Program establishes the following effluent monitoring requirements for discharges authorized under the General Permit.

1. **Flow.** Daily flow monitoring is required for all authorized discharges to allow comparison of actual discharge rate/volume with the rate/volume described in the NOI. Excessive rates of discharge or excessive volumes relative to flow of the receiving waters can have adverse impacts on aquatic habitats.
2. **BOD and Total Suspended Solids.** The discharger must demonstrate that the discharge is a high quality, relatively pollutant free wastewater. Low threat discharges with a duration longer than a month are required to monitor monthly for BOD and TSS to ensure that the discharge continues as a high quality water that does not contain any degradable wastewater and is not discharging effluent that

has unacceptable levels of TSS that could result, for example, from algal growth in an effluent.

3. **Total Chlorine Residual.** Due to the aquatic toxicity of chlorine, daily monitoring for this pollutant is required for all discharges that originate as a disinfected water.
4. **Settleable Solids.** The discharger must demonstrate that the discharge is a high quality, relatively pollutant-free wastewater that will not contribute settleable solids to the receiving water.
5. **Field parameters – temperature, turbidity, pH, specific conductance and dissolved oxygen.**

The discharger must sample the field parameters of temperature, turbidity, pH, specific conductance, and dissolved oxygen at least twice hourly at the start of the discharge and until such time that steady state conditions can be demonstrated in order to ensure that receiving water limitations will not be violated by the discharge. On-going monitoring (4X/day) is a reasonable frequency to ensure that water quality objectives for these parameters are complied with. The General Permit allows the Executive Officer to reduce monitoring frequencies if this can be done without compromising water quality.

6. **Visual Observations.** The MRP requires daily observance of the discharge and receiving water conditions to detect the presence of such pollutants as debris, films, suspended solids, and turbidity, and to assess physical impacts to the receiving water - stream scouring, bank erosion, unusual aquatic growths, etc. to ensure compliance with narrative receiving water limitations.
7. **Toxic Pollutants.** Low threat discharges that continue for more than one year may be required to monitor for any toxic pollutants for which water quality criteria or objectives have been established for the receiving stream. For example, this additional monitoring requirement may be applied to any discharge for which pre-project sampling revealed levels of any toxic pollutant that was below the applicable water quality criteria. This additional monitoring requirement may be stipulated in the authorization letter or may be requested at a later date if Regional Water Board staff determines that this requirement is necessary to ensure water quality protection.

Monitoring for the toxic pollutants will provide on-going characterization of authorized discharges and assurance that toxic pollutants are not present in the concentrations that exceed applicable water quality criteria and objectives.

8. **Other.** In accordance with footnote 10 in section IV.A.1 of the Monitoring and Reporting Program, when granting authorization to discharge under the General Permit, the Regional Water Board may stipulate conditions, in addition to those

conditions and requirements established by the General Permit for all authorized discharges, including monitoring requirements, for a specific discharge.

When chlorinated (or brominated) water supplies are being discharged, for example, in addition to monitoring for chlorine (or bromine), the Regional Water Board may require monitoring for the common byproducts of chlorination, the trihalomethanes, which include chloroform, chlorodibromomethane, dichlorobromomethane, and bromoform.

### **C. Whole Effluent Toxicity Testing Requirements**

Due to the low threat nature of discharges authorized under the General Permit, whole effluent toxicity monitoring requirements are not required by the General Permit and therefore there are no monitoring requirements for whole effluent toxicity established in the Monitoring and Reporting program in Attachment E.

### **D. Receiving Water Monitoring**

#### **1. Surface Water**

Surface water monitoring is required to assess potential impacts to receiving waters and to determine compliance with receiving water limitations established by the General Permit. Visual monitoring to assess the success of BMPs at preventing erosion and scouring and nuisance conditions is an essential part of the MRP.

#### **2. Groundwater**

Discharges to land and surface waters, particularly when the surface water channel is dry or low flow conditions, have the potential to impact ground water. Receiving water limitations for groundwater in this General Permit are based on water quality objectives for groundwater from the Basin Plan.

### **E. Other Monitoring Requirements**

As discussed previously, when authorization to discharge under the General Permit is granted, the Regional Water Board may establish monitoring requirements for a specific discharger, in addition to those established by the General Permit for all authorized discharges. It is not the intent of Regional Water Board staff to design a monitoring plan for each discharger. In fact, such "individualization" or monitoring requirements defeats, to some extent, the purpose of a General Permit, which is to ease the administrative burden of regulating a large number of similar dischargers. The Regional Water does want to retain, however, the discretion to require supplemental monitoring for a specific discharger, if site or discharge-specific conditions merit attention in addition to that provided by the General Permit.

### **F. Reporting Requirements**

The Monitoring and Reporting Program establishes reporting requirements to enable Regional Water Board staff to assess compliance with the terms and conditions of the General Permit and to maintain effective oversight of low threat discharges and their potential impacts to receiving waters of the North Coast Region. Reporting requirements for most dischargers include a requirement to submit monthly Self Monitoring Reports (SMRs).

## **VIII. RATIONALE FOR PROVISIONS**

### **A. Standard Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with NPDES regulations at 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. Authorized dischargers must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in this Order. Section 123.25(a) (12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j) (5) and (k) (2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

### **B. Special Provisions**

#### **1. Reopener Provisions**

- a. Standard Revisions (Provision VI.C.1.a). This provision contains a reopener provision that allows the Regional Water Board to reopen this Order to modify its conditions and requirements in accordance with 40 CFR section 122.62.
- b. Reasonable Potential (Provision VI.C.1.b). This provision allows the Regional Water Board to modify, or revoke and reissue, this Order if present or future investigations demonstrate that the Dischargers governed by this Order are causing or contributing to excursions above any applicable priority pollutant criterion or objective, or adversely impacting water quality and/or the beneficial uses of receiving waters.
- c. Chlorine Residual Policy (Provision VI.C.1.c). The State Water Board has developed the Total Residual Chlorine draft policy, which, when adopted, is intended to establish consistent standards and implementation procedures for regulating chlorine statewide. This reopener allows the Regional Water Board to

reopen this Order to include a revised reporting level to determine compliance with effluent limitations for total residual chlorine if a statewide policy for total residual chlorine is adopted during the term of this Order.

## **2. Special Studies and Additional Monitoring Requirements**

**Pollution Prevention and Monitoring and Reporting Plan (PPMRP).** Water suppliers may request to have multiple discharge points from a single project covered under a single enrollment under this General Permit (see examples at the end of section I.A of the General Permit). For the purposes of this General Permit, these multiple discharge points may be considered a project. Water suppliers covered by this General Permit may include irrigation districts, water districts, and water agencies. In lieu of the specific effluent and receiving water monitoring requirements included in the Monitoring and Reporting Program (Attachment E), water suppliers may elect to develop and implement a PPMRP in accordance with the requirements of Attachment A-2.

## **3. Best Management Practices**

- a. The General Permit will authorize numerous types of discharges which present no or minimal threat to water quality and beneficial uses of receiving waters. Although the General Permit establishes some water quality-based effluent limitations, the development and implementation of a Best Management Practices (BMP) Plan (as required by sections IV.A.1.b and VI.C.3 of this Order) by each authorized discharger is necessary to ensure that the discharge(s) pose a low threat to water quality. The Regional Water Board has determined that implementation of BMPs in combination with effluent limitations is the most efficient manner in which to regulate and control such discharges.

- b. Best Management Practices and Pollution Prevention Plan

As defined by NPDES regulations at 40 CFR 122.2, BMPs include schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. The inclusion of BMPs as requirements in discharge permits is authorized by CWA Section 304 (e); and in accordance with NPDES regulations at 40 CFR 122.44 (k), BMPs can be used to control or abate the discharge of pollutants in several circumstances, including, when numeric effluent limitations are infeasible.

Each applicant that requests coverage of a low threat discharge under the General Permit must submit with its NOI, a BMP/PP Plan that identifies structural and nonstructural controls, schedules of activities, prohibited practices, maintenance procedures and other management practices that will be implemented to prevent or reduce the discharge of pollutants and prevent

impacts related to the discharge (e.g., erosion and scouring, adverse impacts on aquatic life, etc.)

The following table (Table F-1) identifies the types of treatment and best management practices to address pollutants of concern by types of discharges. This table identifies practices that are commonly used, but is by no means intended to be all-inclusive. Each discharger will develop a detailed BMP/PP Plan for approval by the Regional Water Board Executive Officer.

**Table F-1. Pollutants of Concern and Reasonably Foreseeable Treatment/Management Measures by Discharge Type**

| <b>Type of Discharge</b>                           | <b>Reasonably Foreseeable Treatment/Management Measures</b>  | <b>Pollutants of Concern</b>  |
|--|--|---|
| Construction dewatering                            | <ul style="list-style-type: none"> <li>• Segregation of flow to prevent introduction of pollutants.</li> <li>• Sediment removal through settling or filtration basins.</li> <li>• Utilize measures such as vegetation, straw bales, silt fences, wattles, and/or sand/gravel bags to control flow rate of discharge to minimize erosion potential and prevent sediment transport.</li> <li>• Utilize stormdrain inlet filters to capture some pollutants</li> <li>• Eliminate source of petroleum hydrocarbons.</li> <li>• No surface water discharge allowed if petroleum hydrocarbons are present or if naturally occurring metals concentrations exceed applicable water quality objectives.</li> </ul> | <ul style="list-style-type: none"> <li>• Sediments</li> <li>• Turbidity</li> <li>• Construction Materials</li> <li>• Total petroleum hydrocarbons</li> <li>• Metals (naturally occurring)</li> <li>• High temperature</li> </ul>          |
| Development and test pumping of water supply wells | <ul style="list-style-type: none"> <li>• Dechlorinate water (if chlorine has been used) using aeration and/ or sodium thiosulfate and/or other appropriate means.</li> <li>• Sediment removal in discharge through settling or filtration basins.</li> <li>• Utilize measures such as vegetation, straw bales, silt fences, wattles, and/or sand/gravel bags to control flow rate of discharge to minimize erosion potential and</li> </ul>  | <ul style="list-style-type: none"> <li>• Sediments</li> <li>• Total dissolved solids</li> <li>• Chlorine and associated trihalomethanes</li> <li>• Naturally occurring metals</li> <li>• Glues (volatile organic hydrocarbons)</li> </ul> |

| Type of Discharge  | Reasonably Foreseeable Treatment/Management Measures  | Pollutants of Concern   |
|--|---|---|
|  | <p>prevent sediment transport.</p> <ul style="list-style-type: none"> <li>• Utilize instream diffuser, if necessary, to prevent instream erosion.</li> <li>• No surface water discharge allowed if naturally occurring metals concentrations exceed applicable water quality objectives.</li> </ul>   |   |
| <p>Discharges from potable water sources</p> <p>Maintenance and repair of water supply structures (e.g., pipelines, tanks, reservoirs)</p> | <ul style="list-style-type: none"> <li>• Dechlorinate water (if chlorine has been used) using aeration and/ or sodium thiosulfate and/or other appropriate means.</li> <li>• Settling and/or filtration as necessary to remove sediments, scale, rust, corrosion products</li> <li>• Utilize measures such as vegetation, straw bales, silt fences, wattles, and/or sand/gravel bags to control flow rate of discharge to minimize erosion potential and prevent sediment transport.</li> <li>• Utilize instream diffuser, if necessary, to prevent instream erosion.</li> <li>• No surface water discharge allowed if metals or trihalomethane concentrations exceed applicable water quality objectives.</li> </ul> | <ul style="list-style-type: none"> <li>• Chlorine and associated trihalomethanes</li> <li>• Metals (e.g.,arsenic, iron, copper, lead, zinc: naturally occurring from water supply or picked up from metallic surfaces of pipes and storage tanks)</li> <li>• Sediments</li> <li>• Total dissolved solids</li> <li>• Minor adhesives</li> <li>• Scale, rust, corrosion products</li> </ul> |
| <p>Hydrostatic testing of new pipelines, tanks, reservoirs, etc., used for purposes other than potable water supply</p>                    | <ul style="list-style-type: none"> <li>• Eliminate source of petroleum hydrocarbons</li> <li>• Settling and/or filtration as necessary to capture scale, rust, corrosion products</li> <li>• No surface water discharge allowed if petroleum hydrocarbons are present or if naturally occurring metals concentrations exceed applicable water quality objectives.</li> </ul>  | <ul style="list-style-type: none"> <li>• Scale and corrosion products</li> <li>• Total petroleum hydrocarbons</li> <li>• Metals</li> </ul>  |

| <b>Type of Discharge</b>  | <b>Reasonably Foreseeable Treatment/Management Measures</b>   | <b>Pollutants of Concern</b>  |
|---|---|---|
| Geothermal well testing   | <ul style="list-style-type: none"> <li>• Settling and/or filtration to remove sediment</li> <li>• Cooling to address high temperature</li> </ul>  | <ul style="list-style-type: none"> <li>• Sediments</li> <li>• Total dissolved solids</li> <li>• High Temperature</li> <li>• Metals</li> </ul>   |
| Subterranean seepage dewatering (e.g., dewatering of structures situated below ground level such as basements, roadways, etc) | <ul style="list-style-type: none"> <li>• Segregation of flow to prevent introduction of pollutants.</li> <li>• Sediment removal through settling or filtration basins.</li> <li>• Control discharge flow rate to minimize erosion potential.</li> <li>• No surface water discharge allowed if petroleum hydrocarbons are present or if naturally occurring metals concentrations exceed applicable water quality objectives.</li> </ul> | <ul style="list-style-type: none"> <li>• Sediments</li> <li>• Total Dissolved Solids</li> <li>• Petroleum Hydrocarbons</li> <li>• Metals (e.g., arsenic, iron) that are naturally occurring in groundwater</li> <li>• Low dissolved oxygen</li> </ul> |
| Dewatering of dredge spoils   | <ul style="list-style-type: none"> <li>• Settling and/or filtration to remove sediment/turbidity from discharge</li> <li>• No surface water discharge allowed if petroleum hydrocarbons are present or if naturally occurring metals concentrations exceed applicable water quality objectives.</li> </ul>  | <ul style="list-style-type: none"> <li>• Sediments</li> <li>• Turbidity</li> <li>• Nutrients</li> <li>• Metals (naturally occurring)</li> <li>• Petroleum hydrocarbons</li> <li>• Grease and Oil</li> </ul>   |

#### **4. Special Provisions for Municipal Facilities (POTWs Only)**

The General Permit is not applicable to discharges from POTWs.

#### **5. Other Special Provisions**

- a. Stormwater. This provision requires each Discharger authorized to discharge under this General Permit to comply with the State's regulations relating to industrial and construction stormwater activities.
- b. Mitigation Measures. Dischargers enrolled under this General Permit are required to implement BMPs in accordance with a BMP/PP Plan submitted with each Dischargers' NOI. In order to ensure that BMPs do not cause adverse environmental impacts, each Discharger shall implement all applicable mitigation measures identified in section VII.C.6.b of this General Permit.



## **6. Compliance Schedules**

The General Permit does not include compliance schedules.

## **IX. PUBLIC PARTICIPATION**

The California Regional Water Quality Control Board, North Coast Regional Water Board, is considering the issuance of waste discharge requirements (WDRs) that will serve as a General NPDES Permit for low threat discharges throughout the Region. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

### **A. Notification of Interested Parties**

The Regional Water Board has notified interested agencies, parties, and persons of its intent to prescribe general waste discharge requirements for low threat discharges and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided to interested parties through specific mailings, distribution through the Regional Water Board Lyris Email System, the following posting on the Regional Water Board's Internet site at: [http://www.waterboards.ca.gov/northcoast/public\\_notices/public\\_hearings/npdes\\_permits\\_and\\_wdrs.shtml](http://www.waterboards.ca.gov/northcoast/public_notices/public_hearings/npdes_permits_and_wdrs.shtml) and through publication in the Press Democrat, Times Standard, Siskiyou Daily and Triplicate on May 7, 2009.

### **B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on June 8, 2009.

### **C. Public Hearing**

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: July 23, 2009  
Time: 8:30 a.m. or as soon as possible  
Location: North Coast Regional Water Quality Control Board  
5550 Skylane Boulevard, Suite A  
Santa Rosa, California 95403

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is [www.waterboards.ca.gov/northcoast](http://www.waterboards.ca.gov/northcoast) where you can access the current agenda for changes in dates and locations.

#### **D. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

#### **E. Information and Copying**

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling 707-576-2220.

#### **F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

#### **G. Additional Information**

Requests for additional information or questions regarding this Order should be directed to Cathleen Goodwin at [cgoodwin@waterboards.ca.gov](mailto:cgoodwin@waterboards.ca.gov) or (707) 576-2687.

**ATTACHMENT G**

**NOTICE OF TERMINATION  
OF COVERAGE UNDER THE  
GENERAL PERMIT/WASTE DISCHARGE REQUIREMENTS  
FOR**

**LOW THREAT DISCHARGES TO SURFACE WATERS IN THE NORTH COAST REGION  
NPDES Permit No. CA0024902, Order No. R1-2009-0045**

Pursuant to section II.D of the General Permit, this Notice of Termination must be submitted to the Regional Water Board within 30 days following completion of a discharge, which was authorized by the General Permit

**I. Owner/Operator/Site**

|               |          |        |
|---------------|----------|--------|
| Owner:        | Contact: | Phone: |
| Operator:     | Contact: | Phone: |
| Site Name:    | WDID No. |        |
| Site Address: |          |        |
| City:         | County:  | Zip:   |

**II. Start / End Date**

|                       |
|-----------------------|
| Discharge Start Date: |
| Discharge End Date:   |

**III. Reason for Termination**

|  | Y or N |
|--|--------|
| a. The discharge authorized by the General Permit has been permanently terminated. |        |
| b. Wastewater has been redirected:   |        |
| 1. to a sanitary sewer system  |        |
| 2. to land application   |        |
| 3. to reuse (e.g., irrigation)   |        |
| 4. to infiltration or evaporation ponds  |        |
| 5. other (describe)  |        |

**IV. Certification**

I certify under penalty of law that the discharge(s) authorized under NPDES General Permit No. CA0024902, at the site identified herein, has been permanently terminated. I understand that with the submittal of this Notice of Termination, the discharge(s) is no longer authorized; however the Owner / Operator shall remain responsible for any violations of the General Permit that occurred during the period of discharge.

|   |
|---|
| Name (print):                                   |
| Title: <span style="float: right;">Date:</span> |
| Signature:                                      |

## D.2 Region 2. San Francisco Bay Regional Water Quality Control Board

None. Seek coverage under the Construction General Permit or a site-specific permit.

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### **D.3 Region 3. Central Coast Regional Water Quality Control Board**

Order No. R3-2011-0223. National Pollutant Discharge Elimination System (NPDES) Permit No. CAG993001, General Permit for Discharges with Low Threat to Water Quality

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Matthew Rodriguez  
Secretary for  
Environmental Protection

# California Regional Water Quality Control Board Central Coast Region

895 Aerovista Place, Suite 101, San Luis Obispo, California 93401-7906  
(805) 549-3147 • FAX (805) 543-0397  
<http://www.waterboards.ca.gov/centralcoast>



Edmund G. Brown Jr.  
Governor

December 9, 2011

Dear General Permit Enrollee:

**DRAFT WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2011-0223, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. CAG993001, GENERAL PERMIT FOR DISCHARGES WITH LOW THREAT TO WATER QUALITY**

At its public meeting on December 1, 2011, the Central Coast Water Board adopted the subject General Permit, with several changes you should be aware of:

1. **Brine discharges from desalination facilities:** Clarifying language was added for these discharges into Monterey Bay National Marine Sanctuary on pages 2, 3, and 8. Prohibition No. 7 on page 12 was removed, and the list of prohibitions renumbered.
2. **Bilge water discharges:** Clarifying language was added to No. 4(c) on page 2 and the footnote on page 3.
3. **Landscape and swimming pool discharges:** Clarifying language was added to the footnote on page 3.
4. **Priority Pollutant Table, Attachment D:** the table included as part of the agenda package was incorrect. During discussion of this item at the Board meeting, Water Board staff presented the correct table (identical to what was previously distributed as part of the public notice of the draft permit).

In addition, you are automatically enrolled under the attached General Permit. If you do not wish to be enrolled, please submit a Notice of Termination (see Attachment C). The General Permit will also be posted online at:

[http://www.waterboards.ca.gov/centralcoast/board\\_decisions/adopted\\_orders/index.shtml](http://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/index.shtml)

If you have questions regarding the General Permit, please contact Sheila Soderberg at (805)549-3592, [ssoderberg@waterboards.ca.gov](mailto:ssoderberg@waterboards.ca.gov).

Sincerely,

Roger W. Briggs  
Executive Officer

cc's on next page:

*California Environmental Protection Agency*



Marija Vojkovich, California Department of Fish and Game, [mvojkovich@dfg.ca.gov](mailto:mvojkovich@dfg.ca.gov)  
Deirdre Whalen, Monterey Bay National Marine Sanctuary, [deirdre.whalen@noaa.gov](mailto:deirdre.whalen@noaa.gov).  
Kurt Souza, Drinking Water Program, [Kurt.Souza@cdph.ca.gov](mailto:Kurt.Souza@cdph.ca.gov)  
Dan Connally, PG Environmental, LLC, [Dan.Connally@pgenv.com](mailto:Dan.Connally@pgenv.com)  
David Smith, USEPA Region IX, [Smith.davidw@epa.gov](mailto:Smith.davidw@epa.gov)  
Jamie Marincola, Water Division, USEPA Region IX, [Marincola.JamesPaul@epa.gov](mailto:Marincola.JamesPaul@epa.gov)  
Steve Shimek, Monterey Coastkeeper, [steve@montereycoastkeeper.org](mailto:steve@montereycoastkeeper.org)  
State Water Board NPDES, [NPDES\\_wastewater@waterboards.ca.gov](mailto:NPDES_wastewater@waterboards.ca.gov)

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906**

**ORDER NO. R3-2011-0223  
NPDES NO. CAG993001**

**WASTE DISCHARGE REQUIREMENTS  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT  
FOR DISCHARGES WITH LOW THREAT TO WATER QUALITY**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board), finds:

1. **Purpose of Order** - This Region-wide General NPDES Permit for Discharges With Low Threat to Water Quality (General Permit) authorizes the discharge of wastes meeting the criteria specified in Finding 2 of this General Permit to waters of the United States by any person, partnership, firm, corporation, association, trust estate, or any other legal entity (hereafter Discharger). Low-threat discharges are discharges that contain minimal amounts of pollutants and pose little or no threat to water quality and the environment.
2. **Enrollment Criteria** - To be authorized by this General Permit, discharges must meet the following criteria:
  - a. Pollutant concentrations in the discharge do not (a) cause, (b) have a reasonable potential to cause, or (c) contribute to an excursion above any applicable water quality objectives, including prohibitions of discharge.
  - b. The discharge does not include water added for the purpose of diluting pollutant concentrations.
  - c. Pollutant concentrations in the discharge will not cause or contribute to degradation of water quality or impair beneficial uses of receiving waters.
  - d. Pollutant concentrations in the discharge shall not exceed the limits in Attachment D of this Order unless the Executive Officer determines that the applicable water quality control plan (i.e., Ocean Plan and/or State Implementation Policy) does not require effluent limits (Application Requirement A.9 of this Order).
  - e. The discharge shall not cause acute or chronic toxicity in receiving waters.
  - f. The discharger shall demonstrate the ability to comply with the requirements of this General Permit.
3. **Examples of Low Threat Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries** - The following are examples of categories of low threat discharges to inland surface waters, enclosed bays, and estuaries of California that may be authorized by this

General Permit, provided discharges meet the criteria specified in Finding 2. This is not a complete list of discharges eligible for consideration of coverage under this General Permit:

- a. Discharges associated with water supply well installation, development, test pumping and purging;
- b. Discharges resulting from the maintenance of uncontaminated water supply wells, pipelines, tanks, etc.;
- c. Discharges resulting from hydrostatic testing of water supply vessels, pipelines, tanks, etc.;
- d. Discharges resulting from the disinfection of water supply pipelines, tanks, reservoirs, etc.;
- e. Discharges from water supply systems resulting from system failures, pressure releases, etc.;
- f. Discharges from fire hydrant testing or flushing;
- g. Commercial cooling tower water;
- h. Evaporative condensate;
- i. Swimming pool and landscape drainage; and
- j. Other low-threat discharges not covered by the following general permits: the Construction Activities Storm Water General Permit (construction storm water permit, which covers all sites that disturb at least one acre of soil or whose projects are part of a larger common plan of development that in total disturbs one or more acres); Industrial Activities Storm Water General Permit (industrial storm water permit); Caltrans Statewide General Permit; Aquatic Pesticides Statewide General Permit (vector and weed control); or Statewide General NPDES Permit for Discharges from Utility Vaults and Underground Structures. All discharges subject to these statewide permits are ineligible for coverage under this General Permit.
- k. Other similar types of wastes that pose a low threat to water quality yet require a NPDES permit.

The U.S. Environmental Protection Agency (USEPA) and State Water Resources Control Board (State Water Board) classify these discharges as minor discharges. These discharges may be treated and discharged on either a continuous or a batch basis. For discharges from construction sites smaller than one acre that are part of a larger common plan of development or that may cause significant water quality impacts, dischargers must seek coverage under the construction storm water permit or an individual NPDES permit.

4. **Examples of Low Threat Discharges to Ocean Waters** – In addition to those listed in Finding No. 3, the following examples of categories of low threat discharges to ocean waters of California that may be authorized by this General Permit, provided discharges meet the criteria specified in Finding 2. This is not a complete list of discharges eligible for consideration of coverage under this General Permit:

- a. Brine from small desalination facilities<sup>1</sup>
- b. Discharge of seafood processing wash water; and
- c. Discharge of treated bilge water from harbor pump-out facilities<sup>2</sup>.

---

<sup>1</sup> Brine discharges from desalination facilities are prohibited in the Monterey Bay National Marine Sanctuary and are not permitted under this low threat General Permit. However, the Central Coast Water Board will consider permitting brine discharges to the sanctuary under individual NPDES permits.

5. Discharges with low threat to water quality generally have low flows. For continuous discharges, the following guidelines generally define low flows:

**Table 1 Low Threat Continuous Discharge Guidelines**

| Type of Continuous Discharge | Maximum Daily Flow (MGD) |
|------------------------------|--------------------------|
| Cooling Water                | 0.1                      |
| Evaporative Condensate       | 0.1                      |
| Desalination Brine           | 0.05                     |
| Other Low Threat Discharges  | 0.05                     |

6. For intermittent or one-time discharges, the following guidelines generally define low-threat discharges with low flow volumes:

**Table 2 Low Threat Intermittent Discharge Guidelines**

| Type of Intermittent or One-Time Discharge  | Max Daily Flow (MGD) | Duration |
|---|----------------------|----------|
| Supply well installation, development, test pumping and purging   | 0.25                 | 1 Month  |
| Maintenance, hydrostatic testing, disinfection, and pressure releases from water supply wells, pipelines, tanks, reservoirs, etc. | 0.25                 | 3 Months |
| Fire hydrant testing or flushing  | 0.25                 | 2 Months |
| Landscape and Swimming Pool Water <sup>3</sup>  | 0.025                | 1 Month  |
| Hydrostatic Tank and Pipe Test Water  | 0.25                 | 3 Months |
| Construction Dewatering for sites less than 1-acre and are not part of a larger common construction plan                          | 0.1                  | 1 Year   |
| Other Low Threat Discharges   | 0.05                 | 6 Months |

7. Discharges that qualify for the State Implementation Plan's Categorical Exceptions are considered low threat to water quality. These discharges include discharges associated with resource or pest management (i.e., vector or weed control, pest eradication, or fishery

<sup>2</sup> Most of the harbor districts in our region operate and maintain bilge and oil disposal/recycling facilities for commercial and private vessel owner use, and these facilities are enrolled under the existing low threat General Permit. In addition, Moss Landing Harbor, Monterey Harbor/Marina, Santa Barbara Harbor/Marine, Port San Luis Harbor, and Morro Bay Marina are all certified Clean Marinas. The Clean Marinas CA program was developed to provide clean facilities to the boating community and protect the State's waterways from pollution.

<sup>3</sup> It is not Water Board staff's intent to require enrollment of swimming pool or hot tub discharges at private residences. Discharges from large municipal pools or resorts must apply for enrollment under this low threat General Permit. Landscape and swimming pool water discharges may also be covered under municipal stormwater NPDES permits.

management) conducted by public entities or mutual water companies to fulfill statutory requirements, including, but not limited to, those in the California Fish and Game, Food and Agriculture, Health and Safety, and Harbors and Navigation codes; or associated with drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety code.

8. This General Permit meets the requirements of 40 CFR 122.28(a)(2)(ii). The categories of waste discharge permitted under this order:
  - a. Involve similar threats to water quality;
  - b. Discharge similar type of wastes;
  - c. Require similar effluent limitations;
  - d. Require similar monitoring; and
  - e. Are more appropriately controlled under a general permit than individual permits.
9. Use of this General Permit to regulate the specified discharges is in the public interest.
10. The Central Coast Water Board may determine that a waste discharge eligible for authorization by this General Permit is more appropriately regulated under an individual NPDES permit, another general NPDES permit, or waste discharge requirements. If an individual NPDES permit, or another general NPDES permit, or waste discharge requirements is issued for a discharge, applicability of this General Permit for the discharge is immediately terminated on the effective date of the alternative permit.
11. Changes to this General Permit, including the required State Implementation Policy monitoring, are applicable to Dischargers previously enrolled under previous version of this General Permit.
12. Special circumstances allow enrollees the benefit of submitting a single application for multiple qualifying low-threat discharges within a specific groundwater basin or receiving water body. Enrollees may add subsequent new discharges to the existing low-threat permit enrollment at a future date by submitting a notice of intent (NOI) that indicates an "Additional Discharge to Existing Low Threat to Water Quality General Permit" and provide the required information as stated in Section A of the General Permit.

#### **RECEIVING WATER BENEFICIAL USES**

13. **Surface Waters** - Existing and potential beneficial uses of surface waters in the Central Coast Region may include:
  - a. Municipal and domestic supply;
  - b. Agricultural supply;
  - c. Industrial process and service supply;
  - d. Groundwater recharge;
  - e. Freshwater replenishment;
  - f. Navigation;
  - g. Hydropower generation;

- h. Water contact recreation;
  - i. Non-contact water recreation;
  - j. Commercial and sport fishing;
  - k. Aquaculture;
  - l. Cold and warm fresh water habitat;
  - m. Inland saline water habitat;
  - n. Estuarine habitat;
  - o. Marine habitat;
  - p. Wildlife habitat;
  - q. Preservation of biological habitats of special significance;
  - r. Rare, threatened or endangered species;
  - s. Migration of aquatic organisms;
  - t. Spawning, reproduction and/or early development;
  - u. Shellfish harvesting; and
  - v. Areas of special biological significance.
14. **Groundwater** - Many surface waters within the region recharge underlying groundwater basins. The existing and potential beneficial uses of groundwater within the Central Coast Region include:
- a. Municipal and domestic supply;
  - b. Agricultural supply;
  - c. Industrial process and service supply.

#### SOURCES OF REQUIREMENTS

15. **Basin Plan** - The Central Coast Water Board has adopted the *Water Quality Control Plan, Central Coast Basin* (the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region.
16. **Ocean Plan** - The State Water Board adopted the first *Water Quality Control Plan, Ocean Waters of California-California Ocean Plan* (Ocean Plan) in 1972 and subsequently amended it in 1978, 1983, 1988, 1990, 1997, 2001, and 2005. The Ocean Plan contains water quality objectives and other requirements governing waste discharges to the Pacific Ocean. Water quality-based objectives or criteria contained in Table B of the Ocean Plan establish the General Permit ocean-only discharge criteria for pollutants. See Attachment D for Ocean Discharge Criteria limits.
17. Effluent limitations and toxic effluent standards established pursuant to Sections 301, 302, 304, and 307 of the Clean Water Act (CWA) and amendments thereto are applicable to these discharges.
18. Federal regulations require effluent limitations for all pollutants that are or may be discharged at a concentration causing or having reasonable potential to cause, or contribute to in-stream excursions above narrative or numerical water quality standards.

19. **National Toxics Rule and California Toxics Rule.** On December 22, 1992, and May 18, 2000, USEPA adopted the National Toxics Rule and the California Toxics Rule, respectively. These toxic rule regulations are codified in 40 CFR section 131.36 and section 131.38 respectively, and establish numeric criteria for priority toxic pollutants for California's inland surface waters, enclosed bays, and estuaries.
20. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*. The State Implementation Policy establishes procedures to implement National Toxics Rule and California Toxics Rule water quality criteria as well as water quality objectives contained in the Basin Plan. The State Implementation Policy requires dischargers to submit sufficient data to determine the need for water quality-based effluent limits and establishes procedures for determining that need, and for calculating these effluent limits, when necessary.

In accordance with the methodology of the State Implementation Policy, the lowest (most stringent) applicable water quality-based objective or criterion contained in the Basin Plan, the National Toxics Rule, and the California Toxics Rule were compared to determine the General Permit water quality criteria for toxic pollutants. See Attachment D for Low Threat Water Quality Criteria.

## REGULATORY CONSIDERATIONS

21. **Total Maximum Daily Load (TMDL)** – The Central Coast Water Board is currently developing and implementing TMDLs for many impaired water bodies in the Central Coast Region. Enrollees under this General Permit that discharge to these impaired water bodies may be required to collect discharge monitoring data applicable to developing appropriate future waste load allocations for the discharge.
22. **California Environmental Quality Act (CEQA)** - The action to renew this General Permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act in accordance with Section 13389 of the California Water Code.
23. The State Implementation Policy authorizes Water Boards to grant categorical exceptions from meeting the priority pollutant criteria/objectives, if determined to be necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the Safe Drinking Water Act or California Health and Safety Code. Generally, discharges of potable water are made to fulfill California Department of Health statutory requirements, and to ensure steady and safe drinking water supply to users. The potable water discharges under this permit are mostly intermittent, short duration, high flow discharges that comply with California Department of Health Maximum Contaminant Levels for protection of human health. Therefore, potable well discharges as qualified under this permit have been determined to pose no significant threat to water quality and meet the conditions for categorical exception under State Implementation Policy. The Central Coast Water Board actions on issuing this permit for existing and new potable water discharges, and on the exceptions is exempt from CEQA in accordance with California Code of Regulations, Title 14,

Section 15061 (b)(3) which states that CEQA only applies to projects which have the potential for causing adverse environmental effects.

To satisfy the categorical exception requirements of Section 5.3 of the State Implementation Policy, dischargers seeking enrollment under this General Permit will be required to submit project-specific information to the Executive Officer on the discharge and its water quality effects. The information required by the State Implementation Policy is presented in Section A.2 Application Requirements.

24. **Mandatory Minimum Penalties** - The Porter-Cologne Water Quality Control Act establishes mandatory minimum penalties for certain types of violations of NPDES permit. California Water Code sections 13385 and 13385.1 require Water Boards to impose mandatory minimum penalties of \$3,000 for each "serious violation" and for certain violations occurring four or more times in any period of six consecutive months. Violations of numeric or numerically expressed effluent limits, certain toxicity limitations, and certain reporting violations are subject to mandatory minimum penalties.
25. **Anti-Backsliding** - 40 CFR Section 122.44(l) requires effluent limitations for reissued NPDES permits be at least as stringent as the previous permit, unless certain grounds for "backsliding" apply. All changes to the effluent limitations in the General Permit were made in accordance with anti-backsliding provisions.
26. **Anti-Degradation** - The Central Coast Water Board has considered antidegradation pursuant to 40 CFR Section 131.12 and State Water Resources Control Board Resolution No. 68-16, and finds that these low-threat discharges are consistent with those provisions. This Order authorizes only low-threat discharges that meet the following, and other requirements, to ensure that the discharge will not cause more than minimal degradation of the receiving water. Pollutant concentrations in the discharge must not (a) cause, (b) have a reasonable potential to cause, or (c) contribute to an excursion above any applicable water quality objectives. The discharge must not include water added for the purpose of diluting pollutant concentrations. Pollutant concentrations in the discharge must not cause or contribute to degradation of water quality or impair beneficial uses of receiving waters.

Pollutant concentrations in the discharge will not exceed the limits in Attachment D of this Order unless the Executive Officer determines that the applicable water quality control plan (i.e., Ocean Plan and/or State Implementation Policy) does not require effluent limits (Application Requirement A.9 of this Order). The discharge does not cause acute or chronic toxicity in receiving waters.

#### **GENERAL FINDINGS**

27. **Monitoring and Reporting** - Monitoring and Reporting Program (MRP) No. R3-2011-0223 is part of this General Permit. The MRP requires routine effluent and receiving water monitoring to verify compliance with this General Permit and protection of water quality.
28. **Annual Fee** - The Threat to Water Quality and Complexity rating for this General Permit is 3-C. The annual fee associated with this permit is based upon this rating and subject to



change. Therefore, applicants should contact the Central Coast Water Board staff for the current fee.

29. A permit and the privilege to discharge waste into waters of the state are conditional upon the discharge's complying with provisions of Division 7 of the California Water Code and of the CWA (as amended or as supplemented by implementing guidelines and regulations) and with any more stringent effluent limitations necessary to implement water quality control plans, protect beneficial uses, and prevent nuisance. This Order shall serve as a NPDES Permit pursuant to Section 402 of the CWA. Compliance with this Order should ensure the aforementioned conditions are met and prevent any potential changes in water quality due to the discharge.
30. Brine discharges from desalination facilities into Monterey Bay National Marine Sanctuary are not permitted under this low threat General Permit. However, the Central Coast Water Board will consider permitting brine discharges to the sanctuary under individual NPDES permits.
31. **Public Notice** - On September 1, 2011, the Central Coast Water Board notified the public and interested agencies of its intent to issue general waste discharge requirements for low threat discharges, provided them with an opportunity to submit their written views and recommendations, and scheduled a public hearing.
32. **Public Hearing** - In a public hearing on December 1, 2011, the Central Coast Water Board heard and considered all comments pertaining to the General Permit and found this Order consistent with the above findings.

**IT IS HEREBY ORDERED**, pursuant to authority in Sections 13263 and 13377 of the California Water Code, all Dischargers shall comply with the following:

All technical and monitoring reports submitted pursuant to this Order are required pursuant to section 13383 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order or attachments to this Order or failure to submit a report of sufficient technical quality to be acceptable to the Central Coast Water Board Executive Officer may subject the Discharger to enforcement action pursuant to Sections 13268 and 13385 of the California Water Code.

Throughout these requirements, footnotes are listed to indicate the source of requirements specified. Requirement footnotes are as follows:

A = 1994 Central Coast Region Water Quality Control Plan (Basin Plan)

B = 40 CFR 122

C = 2005 Ocean Plan

D = 2005 Policy for Implementation of Toxics Standard for Inland Surface Waters, Enclosed Bays, and Estuaries of California

Requirements not referenced are based on staff's best professional judgment.

**A. APPLICATION REQUIREMENTS**

1. Dischargers satisfying the following criteria and criteria stated in Finding No. 2 of this Order are eligible for authorization to discharge by this General Permit, provided:
  - a. The Discharger submits a complete NOI (Attachment A) and appropriate first annual fee for each discharge.
  - b. The Discharger submits the following:
    1. A list of all chemicals (including Material Safety Data Sheets) added to the water and the concentrations of such additives in the discharged effluent.
    2. Unless the discharge meets all requirements for a conditional exception (State Implementation Policy Section 5.3), or is solely an ocean surface water discharge as defined in the State Implementation Policy, the Discharger must provide certified analytical results of the effluent for Inland Surface Waters, Enclosed Bays, and Estuaries priority toxic pollutants listed in Attachment D as Chemical Constituents. These analyses are required to fulfill the requirements set forth in the California Toxics Rule to evaluate the potential for water quality degradation and to establish effluent limits.
    3. If the discharge is solely an ocean surface water discharge as defined in the State Implementation Policy, the Discharger must provide certified analytical results of the effluent for Ocean Discharge priority toxic pollutants listed in Attachment D as Chemical Constituents. These analyses are required to fulfill the requirements set forth in the Ocean Plan to evaluate the potential for ocean water quality degradation.
    4. In addition to the requirements of (1) and (2) above, discharges to inland surface waters, enclosed bays, and estuaries must submit certified analytical results of a representative sample of the effluent for the following: **total chlorine, pH, nitrate, turbidity, and total dissolved solids.**
    5. In addition to the requirements of (1) and (3) above, discharges solely to ocean waters must submit certified analytical results of a representative sample of the effluent for the following: **oil and grease, suspended solids, settleable solids, turbidity, pH, and acute toxicity**
    6. In addition to the requirements of (1), (2), (3), and (5) above, flow-through seawater systems with potential to contain fecal pollution must submit certified analytical results of a representative sample of the effluent for **total coliform.**
    7. Certified analytical results of a representative sample of the receiving surface water at points 50-feet upstream and 50-feet downstream from the point of discharge into the receiving water, or if access is limited, at the first point upstream and downstream that is accessible for the following constituents: **pH, temperature, color, turbidity, and dissolved oxygen.**

8. For proposed low-threat discharges from a yet to be constructed facility, analytical results for similar existing systems, or anticipated results based on specific facility design, will be adequate for submittal with the NOI. As part of facility startup, the Discharger shall submit all analytical results required in Section A - Application Requirements of this Order.
  9. If the effluent concentration of any constituent sampled under (2) or (3) above exceeds the applicable criterion listed in Attachment D, the Discharger may submit the reasonable potential analysis in Section 1.3 of the State Implementation Policy or Appendix VI of the Ocean Plan, as applicable. If the Discharger elects not to submit the reasonable potential analysis, or if the Executive Officer determines that one or more constituents would require effluent limits, then the discharge is not eligible for coverage under this General Permit and the Discharger is required to obtain coverage under an individual permit or coverage by a different general NPDES permit. This provision only applies to effluent limits for priority toxic pollutants (State Implementation Policy) or Table B Water Quality Objectives (Ocean Plan). For Dischargers already enrolled in this permit, General Permit coverage shall continue until the Discharger receives an individual permit or enrolls under another applicable general permit. Authorization for coverage under this General Permit may be revoked in the event of violations of Receiving Water Limits, which includes not causing or contributing to water quality objective/criteria excursions.
2. If the Discharger is seeking an exception under Section 5.3 of the State Implementation Policy, the Discharger shall submit the following information and receive subsequent Executive Officer approval:
    - a. A detailed description of the proposed action (i.e., draining water supply pipes, cleaning or maintenance of storm water conveyance systems, water supply well purging, etc.), including the proposed method of completing the action;
    - b. A time schedule;
    - c. A discharge and receiving water quality monitoring plan (before project initiation, during the project, and after project completion, with the appropriate quality assurance and quality control procedures);
    - d. Completed CEQA documentation, if applicable;
    - e. Contingency plans;
    - f. Identification of alternate water supply (if needed);
    - g. Residual waste disposal plans;
    - h. Evidence that the Discharger has notified potentially affected public and governmental agencies of the project.

- i. Upon completion of the project, the discharger shall provide certification by a qualified biologist that the receiving water beneficial uses have been restored.
3. The Discharger, upon request, submits any additional information the Central Coast Water Board determines is necessary to ascertain whether the discharge meets criteria for authorization under this permit.
4. If the Discharger discharges wastewater to or from property not owned by the Discharger and/or is leased or rented by the Discharger, then a letter, signed by the property owner, authorizing the discharge of wastewater to or from his/her property shall be kept with the General Permit (See Standard Provision G.2), where it will be available to operating personnel. If the discharge is to a storm water conveyance system, then notification must be sent to the owner of the storm water conveyance system.
5. If the discharge exceeds 0.3 MGD and is longer than six months in duration or if the discharge qualifies for a State Implementation Policy Categorical Exception, then the Discharger shall submit a contingency plan to immediately address violations or threatened violations of water quality standards (as described in Standard Provision G.4 below).
6. After submittal of an NOI and first annual fee, the Discharger will receive one of the following:
  - a. written authorization and effective date of permit coverage;
  - a. request to submit an application and consideration for coverage under another general or individual permit; or
  - b. written notification of exclusion (NOE) of enrollment under this General Permit.
7. In no case may the discharge occur until the applicant receives written confirmation of enrollment.
8. Authorization to discharge under this General Permit shall terminate upon receipt of a Notice of Termination (NOT), adoption of an individual permit, or coverage by a different general NPDES permit.
9. As of the effective date of this Order, Dischargers covered under Order No. R3-2006-0063 are enrolled under Order No. R3-2011-0223. Such Dischargers must comply with all requirements of Order No. R3-2011-0223 beginning with the effective date. Dischargers who are reenrolled shall comply with all provisions of the reissued General Permit. The analytical results required by Section A - Application Requirements of this Order shall be submitted with the Discharger's next annual report or on the date specified in the Monitoring and Reporting Plan.

**B. DISCHARGE PROHIBITIONS**

1. The discharge of any waste at a location or in a manner different from that described in the approved NOI or regulated by this General Permit is prohibited.

2. Discharge of waste that creates conditions of pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the California Water Code is prohibited.
3. Discharge containing concentrations of pollutants in excess of applicable water quality objectives as stated in the Basin Plan and Attachment D is prohibited.
4. Discharge containing substances in concentrations toxic to human, animal, plant, or aquatic life is prohibited.<sup>A</sup>
5. Discharge of polluted groundwater is prohibited.
6. Discharge to an Area of Special Biological Significance, unless in compliance with the California Ocean Plan, is prohibited.
7. The discharge shall cause no scouring or erosion at the point of discharge into the receiving waters.

**C. EFFLUENT LIMITATIONS<sup>4</sup>**

1. Effluent shall not have detectable chlorine residual greater than or equal to 0.02 milligrams per liter (mg/L).
2. Effluent shall not have measurable total dissolved solids greater than surface water and groundwater quality objectives<sup>A</sup>.
3. Effluent shall not contain substances that:<sup>A</sup>
  - a. Float or become floatable upon discharge.
  - b. Form sediments that degrade aquatic life.
  - c. Accumulate to toxic levels in surface waters, sediments, or biota.
  - d. Significantly decrease the natural light to aquatic life.
  - e. Result in aesthetically undesirable discoloration of the water surface.
4. If the discharge qualifies for a Categorical Exception in accordance with the State Implementation Policy as stated in Finding No. 7, then the discharge shall meet California Department of Public Health Maximum Contaminant Levels (MCLs) for drinking water for protection of human health.<sup>D</sup>
5. If the discharge is to the ocean, the pollutant concentrations in the effluent shall not exceed the concentration limits in the Ocean Plan Table B.

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<sup>4</sup> Compliance shall be determined at a point after exit of facility or site boundaries but before wastewater mixes with any receiving water (i.e., surface water or ocean water).

6. Effluent discharged to ocean waters shall not contain constituents in excess of the limits for the respective constituents shown in Table 3 below:<sup>C</sup>

**Table 3 Discharge to Ocean Water Effluent Limitations**

| Constituent       | Unit  | Monthly (30-day avg.)           | Weekly (7-day avg.) | Max |
|-------------------|-------|---------------------------------|---------------------|-----|
| Oil and Grease    | mg/L  | 25                              | 40                  | 75  |
| Suspended Solids  | mg/L  | --                              | --                  | 60  |
| Settleable Solids | ml/L  | 1.0                             | 1.5                 | 3.0 |
| Turbidity         | NTU   | 75                              | 100                 | 225 |
| pH                | units | between 6.0 to 9.0 at all times |                     |     |

NTU = Nephelometric Turbidity Units

ml/L = milliliters per liter

#### **D. RECEIVING WATER LIMITATIONS**

The following narrative water quality objectives apply to all surface waters, including wetlands, in the Central Coast Region. Receiving water quality is a result of many factors, some unrelated to the discharge. This permit considers these factors, and is designed to minimize the influence of the discharge in the receiving water.

The discharge shall not cause:

1. The following limits to be exceeded in the receiving water:<sup>A</sup>

**Table 4 Discharge to Surface Waters and Wetlands Effluent Limits**

| Constituent        | Maximum or Range  |
|--------------------|---|
| <b>pH</b>          | Between 7.0 and 8.3 at all times, and not changed more than 0.5 units. <sup>A</sup>                     |
| <b>Temperature</b> | Maximum increase of 5°F above natural receiving water temperature. <sup>A</sup>                         |
| <b>Color</b>       | Maximum increase of 15 units, or 10% above natural background color, whichever is greater. <sup>A</sup> |

2. **Turbidity:**

| Where natural turbidity <sup>5</sup> is... | The turbidity shall not be increased more than... |
|--|---|
| less than 25 NTUs                          | 5 NTUs  |
| between 25 and 50 NTUs                     | 20%   |
| between 50 and 100 NTUs                    | 10 NTUs   |
| greater than 100 NTUs                      | 10%   |

3. **Dissolved Oxygen** - Dissolved oxygen concentrations to be depressed below 5.0 mg/L or median values to fall below 85% of saturation.<sup>A</sup>

<sup>5</sup> "Natural Turbidity" shall be determined from receiving water samples taken upstream/upcurrent of the discharge point at a location free from controllable sources of pollution.

4. **Biostimulatory Substances** - Biostimulatory substances in concentrations that promote aquatic growths causing nuisance or adversely affecting beneficial uses.<sup>A</sup>
5. **Taste and Odor** – Taste- or odor-producing substances in concentrations imparting undesirable tastes or odors to fish flesh or other edible products of aquatic origin, causing nuisance, or adversely affecting beneficial uses.<sup>A</sup>
6. **Oil and Grease** - Oils, greases, waxes, or other similar materials in concentrations resulting in a visible film or floating on the surface of the water or on objects in the water, causing nuisance, or otherwise adversely affecting beneficial uses.<sup>A</sup>
7. **Settleable Materials** - Settleable material in concentrations resulting in the deposition of material causing nuisance or adversely affecting beneficial uses.
8. **Floating Materials** - Floating material, including solids, liquids, foams, and scum, in concentrations causing nuisance or adversely affecting beneficial uses.<sup>A</sup>
9. **Suspended Materials** - Suspended material in concentrations causing nuisance or adversely affecting beneficial uses.<sup>A</sup>
10. **Toxicity** - Substances in concentrations toxic to human, plant, animal, or aquatic life, or produce detrimental physiological responses therein.<sup>A</sup>
11. **Radioactivity** - Radionuclides in concentrations deleterious to human, plant, animal or aquatic life; or result in the accumulation of radionuclides in the food web to an extent presenting a hazard to human, plant, animal or aquatic life.<sup>A</sup>
12. **Any Water Quality Standard Excursion** - The discharge shall not (a) cause, (b) have a reasonable potential to cause, or (c) contribute to an excursion above any applicable criterion or water quality objective for the receiving waters adopted by the Central Coast Water Board or the State Water Board or promulgated by U.S. EPA pursuant to Section 303 of the CWA.

#### **E. GROUNDWATER LIMITATIONS**

1. The discharge shall not cause constituent concentrations in the groundwater downgradient of the disposal area to exceed water quality objectives specified in the Basin Plan.<sup>A</sup>
2. The discharge shall not cause concentrations of chemicals and radionuclides in groundwater to exceed primary and secondary drinking water limits set forth in Title 22 of the California Code of Regulations.<sup>A</sup>

#### **F. SOLID WASTE DISPOSAL**

1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner consistent with Title 27 of the California Code of Regulations and approved by the Central Coast Water Board Executive Officer or waste discharge requirements issued by the Central Coast Water Board.

## G. STANDARD PROVISIONS AND REPORTING REQUIREMENTS

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment E to the Order.

NPDES regulations at 40 CFR 122.41 (a) (1) and (b - n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR 123.25 (a) (12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41(j)(5) and (k)(2), because the enforcement authority under the CWC is more stringent. In lieu of these conditions, this Order incorporates by reference CWC §13387(e).

1. **Standard Provisions:** The Discharger shall comply with all Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits, included as Attachment E of this Order, with the exception of A.16. Standard Provision A.16 requires annual reports to be submitted on January 30 of each year. Annual reporting for this General Permit will occur as required in Monitoring and Reporting Program No. R3-2011-0223.
2. The Discharger shall comply with Monitoring and Reporting Program No. R3-2011-0223, included as Attachment B of this General Permit, and any revisions prescribed thereto by the Central Coast Water Board Executive Officer.
3. A copy of this General Permit shall be kept at the discharge facility for reference by operating personnel. Key operating and site management personnel shall be familiar with its contents.
4. If the discharge exceeds 0.3 MGD and is longer than six months in duration or if the discharge qualifies for a State Implementation Policy Categorical Exception then the Discharger shall develop a Contingency Plan. The Contingency Plan shall incorporate contingency measures to be implemented if the discharge violates water quality standards. Required information includes energy dissipation structures, erosion control measures, best management practices, and pollution prevention measures. In no case shall the discharge violate water quality standards or impair beneficial uses. The Water Board shall provide a public notice and comment period of at least 30 days and the opportunity for interested persons to request a hearing, before approving the Contingency Plan.
5. In the event the Discharger wishes to terminate authorization under this General Permit, the Discharger shall submit a completed NOT, included with this General Permit as Attachment C. Termination from coverage will occur on the date specified in the NOT, unless notified otherwise by the Central Coast Water Board. All discharges shall cease before the date of termination, and any discharges to surface waters on or after this date shall be considered in violation of the CWA unless covered by another NPDES permit.



6. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this General Permit by letter, a copy of which shall be immediately forwarded to the Board along with a completed NOT.
7. The Discharger shall take all reasonable steps to prevent any discharge in violation of this permit.<sup>B</sup>
8. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) to achieve compliance with this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of this permit.<sup>B</sup>
9. The Discharger shall furnish the Central Coast Water Board, within a reasonable time, any information that the Central Coast Water Board may request to determine compliance with this General Permit.
10. The Discharger shall allow the Central Coast Water Board or its authorized representatives to:<sup>B</sup>
  - a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records pertinent to this permit are kept;
  - b. Inspect and photograph any facilities, equipment (including monitoring and control equipment), practices, or operations pertinent to this permit;
  - c. Have access to and copy any records pertinent to this permit; and
  - d. Sample or monitor for the purposes of assuring permit compliance.
11. This permit is not transferable to any person except after notice to and approval by the Central Coast Water Board. The Central Coast Water Board may require reissuance or modification of the permit conditions to change the name of the Discharger and incorporate such other requirements as may be necessary to protect water quality.
12. Monitoring results must be based on analyses conducted according to test procedures under 40 CFR Part 136, approved under 40 CFR Part 136, or authorized by the Central Coast Water Board Executive Officer.
13. All reports, NOIs, other documents required by this permit, and other information requested by the Central Coast Water Board shall be signed by a person described below or by a duly authorized representative of that person.<sup>B</sup>
  - a. For a corporation: by a responsible corporate officer such as: (a) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; (b)

any other person who performs similar policy or decision-making functions for the corporation; or (c) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- b. For a partnership or sole proprietorship: by a general partner or the proprietor.
  - c. For a municipal, state, federal, or other public agency: by either a principal executive officer or ranking elected official.
14. Any person signing a document under Section G.13 of the General Permit Standard Provisions makes the following certification, whether written or implied:<sup>B</sup>
- "I certify under penalty of law this document and all attachments were prepared by, or under my direction or supervision, in accordance with a system designed to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
15. If the Discharger monitors any constituent more frequently than required by the permit, the monitoring results shall be submitted.<sup>B</sup>
16. The Discharger shall immediately report any non-compliance potentially endangering public health or the environment. Any information shall be provided orally within 24-hours from the time the Discharger becomes aware of the circumstances. A written report shall also be submitted to the Central Coast Water Board Executive Officer within five (5) days of the time the Discharger becomes aware of the circumstances. The written report shall contain (1) a description of the non-compliance and its cause; (2) the period of non-compliance, including dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and (3) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.<sup>B</sup>
17. The Discharger shall report all instances of non-compliance not reported under Standard Provision Section G.16 of the General Permit at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision Section G.16.<sup>B</sup>
18. The Discharger shall give notice to the Central Coast Water Board as soon as possible of any planned alterations to the permitted facility that may change the nature or concentration of pollutants in the discharge.<sup>B</sup>
19. Violations of this General Permit may result in enforcement actions pursued under the following or other applicable authorities:
- a. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA is subject to a civil penalty not to exceed

\$25,000 per day of violation. Any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA is subject to a fine of not less than \$2,500 nor more than \$25,000 per day for each violation, to imprisonment of not more than one year, or to both penalties. Higher penalties may be imposed for knowing violations and for repeat offenders. The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided under the CWA.<sup>B</sup>

- b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, by imprisonment for not more than six (6) months per violation, or by both.<sup>B</sup> Section 13387 of the California Water Code allows for fines up to \$25,000 per violation and imprisonment for up to two years after such violations.
- c. The CWA provides any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, by imprisonment for not more than two years, or by both. Higher penalties may be imposed for repeat offenders.

20. Order No. R3-2006-0063 is hereby rescinded, except for enforcement purposes.

21. This General Permit expires on **December 1, 2016**. Those enrollees who are covered under this General Permit at the time of expiration will automatically be re-enrolled under the revised General Permit, unless a NOT is submitted to terminate coverage.

I, Roger W. Briggs Executive Officer, do hereby certify that this Order, with all attachments, is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coastal Region on December 1, 2011.



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Roger W. Briggs, Executive Officer

**TO COMPLY WITH THE TERMS OF THE  
GENERAL PERMIT FOR DISCHARGES WITH LOW THREAT TO WATER QUALITY  
(NPDES PERMIT No. CAG993001, WDR ORDER No. R3-2011-0223)**

### I. OWNER/OPERATOR

## II. FACILITY/SITE INFORMATION

### III. BILLING ADDRESS

STATE USE ONLY

|                                   |  |  |  |  |  |
|-----------------------------------|--|--|--|--|--|
| WDID: <input type="text"/>        |  | Regional Board Office <input type="text"/> |  | Date Permit Issued: <input type="text"/> |  |
| NPDES Permit Number:<br>CAG993001 |  | Order Number: <input type="text"/>         |  | Date NOI Received: <input type="text"/>  |  |
|                                   |  | Fee Amount Received: <input type="text"/>  |  |  |  |
|                                   |  | \$ <input type="text"/>                    |  |  |  |

#### IV. DISCHARGE INFORMATION

|   |   |   |   |
|---|---|---|---|
| Monthly discharge volume (Gallons):   | Description of discharge and constituents:  |   |   |
| Flow rate (GPD):  |   |   |   |
| Frequency & duration of discharge:  |   |   |   |
| <p>A. Source of discharges (check all that apply) and attach a diagram of water flow through this facility:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> 1. <input type="checkbox"/> Well installation, development, test pumping and purging<br/> 2. <input type="checkbox"/> Maintenance of water supply wells, pipelines, tanks, etc.<br/> 3. <input type="checkbox"/> Hydrostatic testing of water supply vessels, pipelines, tanks, etc.<br/> 4. <input type="checkbox"/> Disinfection of water supply pipelines, tanks, reservoirs, etc.<br/> 5. <input type="checkbox"/> Water supply system failures, pressure releases, etc.<br/> 6. <input type="checkbox"/> Fire hydrant testing or flushing<br/> 7. <input type="checkbox"/> Cooling tower water </td> <td style="width: 50%; vertical-align: top;"> 8. <input type="checkbox"/> Pool water<br/> 9. <input type="checkbox"/> Evaporative condensate<br/> 10. <input type="checkbox"/> Desalination brines<br/> 11. <input type="checkbox"/> Seafood processing wash water<br/> 12. <input type="checkbox"/> Bilge water<br/> 13. <input type="checkbox"/> Other (describe below) </td> </tr> </table> <p>Describe: _____</p> |   | 1. <input type="checkbox"/> Well installation, development, test pumping and purging<br>2. <input type="checkbox"/> Maintenance of water supply wells, pipelines, tanks, etc.<br>3. <input type="checkbox"/> Hydrostatic testing of water supply vessels, pipelines, tanks, etc.<br>4. <input type="checkbox"/> Disinfection of water supply pipelines, tanks, reservoirs, etc.<br>5. <input type="checkbox"/> Water supply system failures, pressure releases, etc.<br>6. <input type="checkbox"/> Fire hydrant testing or flushing<br>7. <input type="checkbox"/> Cooling tower water | 8. <input type="checkbox"/> Pool water<br>9. <input type="checkbox"/> Evaporative condensate<br>10. <input type="checkbox"/> Desalination brines<br>11. <input type="checkbox"/> Seafood processing wash water<br>12. <input type="checkbox"/> Bilge water<br>13. <input type="checkbox"/> Other (describe below) |
| 1. <input type="checkbox"/> Well installation, development, test pumping and purging<br>2. <input type="checkbox"/> Maintenance of water supply wells, pipelines, tanks, etc.<br>3. <input type="checkbox"/> Hydrostatic testing of water supply vessels, pipelines, tanks, etc.<br>4. <input type="checkbox"/> Disinfection of water supply pipelines, tanks, reservoirs, etc.<br>5. <input type="checkbox"/> Water supply system failures, pressure releases, etc.<br>6. <input type="checkbox"/> Fire hydrant testing or flushing<br>7. <input type="checkbox"/> Cooling tower water   | 8. <input type="checkbox"/> Pool water<br>9. <input type="checkbox"/> Evaporative condensate<br>10. <input type="checkbox"/> Desalination brines<br>11. <input type="checkbox"/> Seafood processing wash water<br>12. <input type="checkbox"/> Bilge water<br>13. <input type="checkbox"/> Other (describe below) |   |   |
| <p>B. Discharge location:</p> <p>Address: _____</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%; border-bottom: 1px solid black;">Township/Range/Section: T _____, R _____, Sec. _____, _____ B&amp;M</td> <td style="width: 40%; border-bottom: 1px solid black;">Latitude _____ Longitude _____</td> </tr> </table> <p>Attach a map showing the discharge site, receiving waters, other nearby surface waters, nearby wells &amp; residences, treatment system, etc.</p>  |   | Township/Range/Section: T _____, R _____, Sec. _____, _____ B&M   | Latitude _____ Longitude _____  |
| Township/Range/Section: T _____, R _____, Sec. _____, _____ B&M   | Latitude _____ Longitude _____  |   |   |

#### V. RECEIVING WATER INFORMATION

|  |
|--|
| <p>A. Does your facility discharge to (Check one):</p> <p>1. <input type="checkbox"/> Storm drain system - Enter owner's name: _____</p> <p>2. <input type="checkbox"/> Directly to waters of U.S. (e.g., river, lake, creek, ocean)</p> <p>3. <input type="checkbox"/> Indirectly to waters of U.S.</p> |
| <p>B. Name of closest receiving water: _____</p>   |

#### VI. LAND DISPOSAL/RECLAMATION

|  |
|--|
| <p>The Water Quality Control Plan encourages reuse/reclamation or land disposal of wastewater where practical. You must evaluate and rule out this alternative prior to any discharge to surface water under this General Permit.</p> <p>Is land disposal/reclamation feasible? Yes _____ No _____ (explain on separate sheet)</p> |
|--|

#### VII. FEES

|   |
|---|
| <p>A check payable to the State Water Resources Control Board in the amount appropriate for a discharge with a complexity rating of III-C must be submitted. Applicants should contact the Water Board for the current fee.</p> |
|---|

#### VIII. CERTIFICATIONS

|  |
|--|
| <p>"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment." In addition, I certify that the provisions of the permit and the Monitoring Program, will be complied with.</p> <p>Printed Name: _____ Title: _____</p> <p>Signature: _____ Date: _____</p> |
|--|

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**MONITORING AND REPORTING PROGRAM NO. R3-2011-0223  
FOR  
DISCHARGES WITH LOW THREAT TO WATER QUALITY  
GENERAL PERMIT NO. CAG993001**

Dischargers regulated under General NPDES Permit No. CAG993001 shall be subject to the following requirements unless such requirements are modified or waived by the Central Coast Water Board Executive Officer. **Additional monitoring requirements may be added by the Executive Officer if needed to adequately ensure compliance with the permit.**

**A. GENERAL**

Specific waste discharger reporting responsibilities are found in Sections 13225(a), 13383, and 13387(b) of the California Water Code and the Environmental Protection Agency's Discharge Monitoring Report (Form 3320-1).

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by the Central Coast Water Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

**B. DEFINITION OF TERMS**

1. A grab sample is an individual sample collected in a short period of time not exceeding 15 minutes. The Discharger will collect grab samples during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. Analytical laboratory results of the grab sample typically determine compliance with annual effluent limits. Grab samples represent only the condition that exists at the time the wastewater is collected.
2. A flow rate is defined as an estimated or accurate measurement of the average daily flow rate using supportable mass transfer calculations or properly calibrated and maintained flow-measuring device.
3. A duly authorized representative is one whose:
  - a. Authorization is made in writing by a principal executive officer or ranking elected official;
  - b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity. Examples of this

individual or position include a general partner in a partnership, sole proprietor in a sole proprietorship, the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

4. A discharge volume is the total effluent throughput occurring within a specified time frame.
5. Effluent E-1: At a point in the discharge line immediately exiting the facility or site boundary but before wastewater mixes with any receiving water following treatment and before it joins or is diluted by any other waste stream, body of water, or substance.
6. Receiving Waters RU-1: At a point 50 feet upstream or up coast from the point of discharge into the receiving water, or if access is limited, at the first point upstream which is accessible.
7. Receiving Waters RD-1: At a point 50 feet downstream or down coast from the point of discharge into the receiving water, or if access is limited, at the first point downstream which is accessible.
8. GPD = Gallons per day
9. mg = milligrams
10. L = liters
11. °F = degrees Fahrenheit
12. NTU = Nephelometric Turbidity Unit
13. TUa = acute toxic unit
14. MPN = most probable number
15. State Implementation Policy Categorical Exception = Dischargers that meet all requirements for a Categorical Exception as defined in section 5.3 of the State Implementation Policy.

### **C. SPECIFICATIONS FOR SAMPLING AND ANALYTICAL METHODS**

The discharger is required to perform sampling and analyses as stated in Sections D, E, and F of this monitoring and reporting program (MRP) and in accordance with the following conditions:

1. All sampling, sample preservation, and analysis shall be performed in accordance with the latest edition of 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants", promulgated by the United States Environmental Protection Agency (EPA), unless otherwise noted. In addition, the Water Board and/or EPA, at

their discretion, may specify test methods which are more sensitive than those specified in 40 CFR 136.

2. Proper calibration and maintenance of all monitoring instruments and equipment shall occur to ensure accuracy of measurements.
3. Effluent
  - a. The Discharger and/or their representative will collect samples representative of effluent discharged at a location exiting the facility or site boundaries but before wastewater mixes with any receiving water and on days coincident with receiving waters sampling unless otherwise stipulated. The Executive Officer may approve an alternative sampling plan if the Discharger demonstrates to the Water Board's satisfaction that expected operating conditions for the facility warrant a deviation from the standard sampling plan.
  - b. Total ammonia nitrogen analysis and un-ionized ammonia calculations shall occur whenever acute toxicity test results determine a potential for toxic effluent to human, animal, plant, or aquatic life.
  - c. If laboratory analyses indicates an exceedance of effluent limitations (General Permit Section C: Effluent Limitation), collection of a confirmation sample shall occur within 24 hours and results known within 24 hours of the sampling. If the confirmation sample results in a constituent limit exceedance then the discharge shall terminate until the Discharger determines the cause of the violation and takes corrective measures restoring compliance. In this case, both the initial and confirmed exceedances are violations. Otherwise, only the initial exceedance is a violation.
  - d. If results of any single acute toxicity test indicate a threatened violation (i.e., the percentage of surviving test organisms is less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with requirements for "experimental water" as described in Standard Methods for the Examination of Water and Wastewater, latest edition), a new test will begin and the discharger shall investigate the cause of the mortalities and report the finding in the next self-monitoring report.
4. Receiving Waters
  - a. Collection of receiving water samples shall occur on days coincident with sampling of effluent.
  - b. Collection of receiving water samples shall occur up stream/coast and down stream/coast of the discharge point so as to be representative, unless otherwise stipulated.
  - c. Collection of samples shall occur within one foot below the surface of the receiving water body, unless otherwise stipulated.



5. Samples shall be collected at a time, place, and manner so as most likely to be representative of the peak discharge.
6. Collection of annual samples shall occur at the initiation of the discharge for the first sample and thereafter collected during a volumetric flow period that is representative of the average annual effluent flow rate or average seasonal effluent flow rate, whichever average is higher. Collection of semi-annual samples shall occur at the initiation of the discharge for the first sample and during January and July thereafter. Quarterly samples shall be collected during January, April, July, and October.
7. A laboratory approved by the State Department of Health Services (DHS) or a laboratory waived by the Executive Officer from obtaining a certification by the DHS for specified analyses shall conduct water and waste analyses. The director of the laboratory whose name appears on the certification or his/her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work including appropriate quality assurance/quality control procedures in his or her laboratory and shall sign all reports of such work submitted to the Central Coast Water Board.

#### **D. START-UP PHASE MONITORING AND REPORTING**

1. Notification: The Discharger shall notify Executive Officer in writing of the start-up date 7 to 14 days prior to start up beginning.
2. Monitoring: During the initial effluent discharge, sampling of the effluent must occur on the first day.
  - a. On the first day of the wastewater discharge system, the effluent shall run until at least three consecutive readings for pH, conductivity, and temperature are within five percent of each other. After attainment of consecutive readings for pH, conductivity, and temperature, the Discharger will collect and submit an effluent sample to a certified laboratory. Prior to receipt of the results of the initial samples, all effluent shall be discharged into a holding tank (that is contained, not discharged to the receiving water) until the results of the analyses show the discharge to be within the effluent limits established in this Order and/or in the authorization letter. Shut down of the wastewater discharge system may occur after the first day's sampling to await the laboratory analytical results and, thereby, reduce the amount of storage needed. For the stored effluent, if the results of the analyses show the discharge to be in violation, the effluent shall: (1) be treated until the treated effluent is in compliance, or (2) be disposed in accord with the provisions of Chapter 15, Title 23, California Code of Regulations.
  - b. If the first day's sampling shows compliance then the wastewater discharge system may proceed to discharge into the receiving water. If shut down of the treatment system is more than eight days during the original start up (awaiting analyses results, etc.), the Discharger must repeat the original sampling and start up procedures.

- Reporting: The discharger shall submit laboratory analytical results, flow rates, chain of custody forms, and descriptions of any changes or modifications to the wastewater discharge system in the start up report in accordance with section G.1 of the MRP.

#### **E. DISCHARGE MONITORING**

- The Discharger shall establish a sampling station designated E-1 for the point of discharge where representative samples of the discharge will occur before the discharge mixes with the receiving waters or any other water flows.
- The following shall constitute the effluent monitoring program barring modification or waiver of requirements by the Executive Officer. The Executive Officer may require additional effluent monitoring if needed to adequately ensure compliance with the permit.
- The Discharger will perform monitoring within the **first 24 hours** of the wastewater discharge system startup and thereafter as directed by the following table. Representative samples of the discharge shall be collected and analyzed according to the following schedule:

**Table 1 – Effluent Monitoring Schedule**

| Constituents                         | Units      | Type of Sample | Minimum Frequency of Sampling and Analysis <sup>1</sup> |
|--------------------------------------|------------|----------------|---|
| Flow Rate                            | GPD        | Estimate       | Start-up then Daily <sup>2</sup>                        |
| Discharge Volume                     | Gallons    | Estimate       | Start-up then Monthly                                   |
| pH                                   | pH Units   | Grab           | Start-up then Monthly                                   |
| Total Chlorine Residual <sup>3</sup> | mg/L       | Grab           | Start-up then Annually                                  |
| Total Suspended Solids               | mg/L       | Grab           | Start-up then Annually                                  |
| Settleable Solids                    | mL/L       | Grab           | Start-up then Annually                                  |
| Total Dissolved Solids               | mg/L       | Grab           | Start-up then Annually                                  |
| Oil and Grease                       | mg/L       | Grab           | Start-up then Annually                                  |
| Temperature                          | °F         | Grab           | Start-up then Annually                                  |
| Color                                | Units      | Grab           | Start-up then Annually                                  |
| Turbidity                            | NTU        | Grab           | Start-up then Annually                                  |
| Dissolved Oxygen                     | mg/L       | Grab           | Start-up then Annually                                  |
| Acute Toxicity <sup>4</sup>          | TUa        | Grab           | Start-up then Annually                                  |
| Total Coliform <sup>5</sup>          | MPN/100 mL | Grab           | Start-up then Annually                                  |

#### **F. RECEIVING WATER MONITORING:**

- The Discharger shall keep an observation log of the receiving water conditions at the point of discharge and throughout the reach bounded by monitoring stations RU-1 and RD-1, as defined in Section E of the MRP.

<sup>1</sup> The Discharger will collect annual effluent samples during a volumetric flow period that is representative of the average effluent flow rate or average seasonal effluent flow rate, whichever average is higher.

<sup>2</sup> Intermittent discharges shall include range, timing, and frequency of flow.

<sup>3</sup> Discharge monitoring for total chlorine residual need not occur if the discharge is not chlorinated or from a chlorinated source.

<sup>4</sup> TUa = 100 / (96-hr LC50%)

<sup>5</sup> Total Coliform monitoring is applicable only to facilities with potential to contain fecal pollution.

**Table 2 – Receiving Water Body Observation Schedule**

| Observation                               | Minimum Frequency of Observation |
|---|----------------------------------|
| Floating or suspended matter in the water | Quarterly                        |
| Discoloration of the water                | Quarterly                        |
| Bottom deposits                           | Quarterly                        |
| Visible films, sheens, or coatings        | Quarterly                        |
| Fungi, slimes, or objectionable growths   | Quarterly                        |
| Potential nuisance conditions             | Quarterly                        |

2. The following shall constitute the receiving water monitoring program for inland surface waters at RU-1 and RD1 barring modification or waiver by the Executive Officer. The Discharger will perform monitoring prior to startup of the wastewater discharge system and thereafter as directed by the following table. The Executive Officer may require additional receiving water monitoring for inland surface and ocean waters if needed to adequately assure compliance with the permit.

**Table 3 – Receiving Water Body Sampling and Analyses Schedule**

| Constituents     | Units    | Type of Sample | Minimum Frequency of Sampling and Analysis |
|------------------|----------|----------------|--|
| pH               | pH Units | Grab           | Prior to Startup then Annually             |
| Temperature      | °F       | Grab           | Prior to Startup then Annually             |
| Color            | Units    | Grab           | Prior to Startup then Annually             |
| Turbidity        | NTU      | Grab           | Prior to Startup then Annually             |
| Dissolved Oxygen | mg/L     | Grab           | Prior to Startup then Annually             |

## **G. REPORTING**

Reporting of data shall be in accordance with the following:

1. Start-up Report: A report on the start up phase shall be submitted to the Central Coast Water Board no more than 15 days after the end of the start up phase. This report shall include field logs of observations and measurements, laboratory results, and a certification that a professional engineer or geologist certified in State of California oversees the wastewater discharge system operation and maintenance activities including the start up work.
2. Contingency Plan: A report summarizing the standard operating procedures of the wastewater discharge system and contingency measures to be implemented if the discharge exceeds 0.3 million gallons per day (MGD) and is longer than six months in duration or if the discharge qualifies for a State Implementation Policy Categorical Exception. The Discharger shall submit a Contingency Plan prior to start-up of wastewater discharge system. At a minimum the report shall include:
  - a. A description of the wastewater discharge system's function, design and operation;
  - b. A description of the nature of the discharge;
  - c. A description of soil erosion prevention measures to be taken at the point of discharge;
  - d. A description of actions that will be taken if the system were to malfunction; and

- e. A description of actions if monitoring indicates potential violation of the Low Threat to Water Quality Waste Discharge Requirements Order No. R3-2011-0223 permit requirements.
3. If the Discharger monitors any pollutant more frequently than is required by this General Permit, the results of such monitoring shall be included in the monitoring reports.
4. For continuous discharges, Dischargers shall submit annual self-monitoring reports by **January 30** of each year. For intermittent discharges, Dischargers shall submit annual self-monitoring reports by **45 days after collection date of annual samples**. For one-time discharges, Dischargers shall submit annual self-monitoring reports within 30 days of termination of discharges.
5. Self-Monitoring Reports: The reports shall include the following:
  - a. Letter of Transmittal: A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include:
    - i. Identification of all violations of waste discharge requirements found during the reporting period, including the date of occurrence and date of determination for each violation.
    - ii. Details of the magnitude, frequency, and dates of all violations.
    - iii. The cause of the violations.
    - iv. Discussion of the corrective actions taken or planned and the time schedule for completion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory.
  - iv. The Self-Monitoring Report must be submitted electronically to [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov). The subject heading in the email must include the site address and the reporting year (e.g., 12345 Main Street, San Luis Obispo, 2006). The electronic mail should contain the identification and number of all violations of this permit found during the reporting period or a statement identifying that no violations were found during the reporting period.
  - v. The annual report shall document that the annual fee has been paid to the State Water Board.
  - vi. A signature from a principal executive officer or ranking elected official of the discharger, or by a duly authorized representative of that person, along with the following certification: "I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are

significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- b. Map or Aerial Photograph: A map or aerial photograph shall accompany the report showing sampling and observation station locations.
  - c. Results of Analyses and Observations: The Discharger shall present monitoring data in tabular form so that the date, constituents, and concentrations are readily discernible. The Discharger shall summarize data in such a manner to clearly illustrate whether the discharge complies with waste discharge requirements. The annual report shall contain at a minimum the results from the monitoring specified above.
6. Chemical Additives Report: If the Discharger introduces chemical additives in a manner that will change effluent characteristics originally not reported in the NOI then the Discharger shall submit to the Central Coast Water Board a report describing the need, method of chemical application and disposal. The Discharger shall submit a Chemical Additives Report at least 30 days before the use of any chemicals in the operation and maintenance of the wastewater discharge system. This report shall include Material Safety Data Sheet (MSDS) for the proposed chemical(s). This MSDS shall include No Observed Effect Level (NOEL) data on most sensitive species for this chemical. The concentration of the proposed chemical should be much less than the NOEL.
7. Late Reports: Please note that effective January 1, 2004, assessment of monetary penalties shall occur for submitting late monitoring reports pursuant to California Water Code Section 13385.1.
8. If the Discharger receives a notification that the electronic mail was undeliverable, the Discharger shall deliver a copy of each monitoring report in the appropriate format to:

**California Regional Water Quality Control Board  
Central Coast Region  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906**

9. The Discharger shall ensure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. A prolonged period of record retention shall occur during the course of any unresolved litigation regarding this discharge or by the request of the Executive Officer. Records of monitoring information shall include:
- a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling, and/or measurements;
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or methods used;
  - f. All sampling and analytical results;
  - g. All monitoring equipment calibration and maintenance records;
  - h. All original strip charts from continuous monitoring devices;
  - i. All data used to complete the application for this general permit; and,
  - j. Copies of all reports required by this general permit.

A handwritten signature in black ink, appearing to read "Robert J. Figg", enclosed within a rectangular border.

Ordered by: \_\_\_\_\_  
Executive Officer

Date: 12-9-11 \_\_\_\_\_

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**NOTICE OF TERMINATION**

**OF COVERAGE UNDER THE  
GENERAL PERMIT FOR DISCHARGES WITH LOW THREAT TO WATER QUALITY  
(NPDES PERMIT No. CAG993001, WDR ORDER No. R3-2011-0223)**

Submission of this Notice of Termination constitutes notice that the owner/operator of facility identified on this form is no longer authorized to discharge wastewater by NPDES General Permit No. CAG993001.

**I. OWNER/OPERATOR**

|                  |        |   |        |
|------------------|--------|---|--------|
| Name:            |        |   |        |
| Mailing Address: |        |   |        |
| City:            | State: | Zip:  | Phone: |
| Contact Person:  |        | 1. <input type="checkbox"/> Owner    2. <input type="checkbox"/> Operator<br>3. <input type="checkbox"/> Owner/Operator |        |

**II. BASIS OF TERMINATION (Please provide additional detail under Section III)**

\_\_\_\_\_ 1. All discharges subject to regulation under the general permit for discharges with low threat to water quality.

Date of termination \_\_\_\_/\_\_\_\_/\_\_\_\_.

\_\_\_\_\_ 2. All wastewater discharge previously authorized by the general permit has been redirected to:

- \_\_\_\_\_ a. wastewater retained on site.
- \_\_\_\_\_ b. wastewater is discharged to a municipal sanitary sewer system.
- \_\_\_\_\_ c. wastewater is discharged to evaporation ponds or percolation ponds offsite.
- \_\_\_\_\_ d. wastewater is reused/reclaimed.
- \_\_\_\_\_ e. other, please explain \_\_\_\_\_

\_\_\_\_\_ 3. Discharge of wastewater is now subject to another NPDES general permit or an individual NPDES permit.

NPDES Permit No. \_\_\_\_\_ Date coverage began \_\_\_\_/\_\_\_\_/\_\_\_\_.

\_\_\_\_\_ 4. There is a new owner/operator of the identified facility.

Date of owner/operator transfer \_\_\_\_/\_\_\_\_/\_\_\_\_.

Has the new owner/operator been notified of NPDES general permit requirements? Yes \_\_\_ No \_\_\_

**NEW OWNER/OPERATOR INFORMATION**

COMPANY NAME \_\_\_\_\_ CONTACT PERSON \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_ TITLE \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_ PHONE \_\_\_\_\_

III. EXPLANATION OF BASIS OF TERMINATION:

IV. CERTIFICATION:

I certify under penalty of law that all wastewater discharges associated with the identified facility that are authorized by NPDES general permit No. CAG993001 have been eliminated or that I am no longer the owner/operator of the facility. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge wastewater under the general permit, and that discharging pollutants in wastewater to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an owner/operator from liability for any violations of the general permit or the Clean Water Act.

PRINTED NAME \_\_\_\_\_ TITLE \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE \_\_/\_\_/\_\_

STATE USE ONLY

|                                       |                                      |   |
|---------------------------------------|--------------------------------------|---|
| WDID:<br> _ _ _ _ _ _ _ _ _ _ _ _ _ _ | Regional Board Verification:<br> _ _ | Date Permit Terminated:<br> _ _ _ _ _ _ _ _ _ |
| Billing Office Notified: _____        |                                      |   |



## ATTACHMENT D

**LOW THREAT WATER QUALITY CRITERIA**

| Chemical Constituent       | CAS Number | Basis   | Inland Surface Waters, Enclosed Bays, and Estuaries Criteria (µg/L or noted) | Ocean Discharge Criteria (µg/L or noted) | Acceptable Analytical Methods <sup>B</sup> |
|----------------------------|------------|---|--|--|--|
| <b>VOLATILE ORGANICS</b>   |            |   |  |  |  |
| 1,1 Dichloroethane         | 75343      | Primary MCL   | 5  | --                                       | GC, GCMS                                   |
| 1,1 Dichloroethene         | 75354      | California Toxics Rule, Ocean Plan                  | 0.057  | 0.9                                      | GC   |
| 1,1,1 Trichloroethane      | 71556      | Primary MCL, Ocean Plan                             | 200  | 540,000                                  | GC, GCMS                                   |
| 1,1,2 Trichloroethane      | 79005      | California Toxics Rule, Ocean Plan                  | 0.6  | 9.4                                      | GC   |
| 1,1,2,2 Tetrachloroethane  | 79345      | California Toxics Rule, Ocean Plan                  | 0.17   | 2.3                                      | GC   |
| 1,2 Dichlorobenzene        | 95501      | Secondary MCL, Ocean Plan                           | 10   | 5,100 <sup>A</sup>                       | GC, GCMS                                   |
| 1,2 Dichloroethane         | 107062     | California Toxics Rule, Ocean Plan                  | 0.38   | 28                                       | GC   |
| 1,2 Dichloropropane        | 78875      | California Toxics Rule                              | 0.52   | --                                       | GC   |
| 1,3 Dichlorobenzene        | 541731     | California Toxics Rule, Ocean Plan                  | 400  | 5,100 <sup>A</sup>                       | GC, GCMS                                   |
| 1,3 Dichloropropene        | 542756     | Primary MCL, Ocean Plan                             | 0.5  | 8.9                                      | GC, GCMS                                   |
| 1,4 Dichlorobenzene        | 106467     | Primary MCL, Ocean Plan                             | 5  | 18                                       | GC, GCMS                                   |
| Acrolein                   | 107028     | National Ambient Water Quality Criteria, Ocean Plan | 21   | 220                                      | GC, GCMS                                   |
| Acrylonitrile              | 107131     | California Toxics Rule, Ocean Plan                  | 0.059  | 0.10                                     | GC, GCMS                                   |
| Benzene                    | 71432      | Primary MCL, Ocean Plan                             | 1  | 5.9                                      | GC   |
| Bromoform                  | 75252      | California Toxics Rule, Ocean Plan                  | 4.3  | 130 <sup>A</sup>                         | GC, GCMS                                   |
| Methyl Bromide             | 74839      | California Toxics Rule, Ocean Plan                  | 48   | 130 <sup>A</sup>                         | GC, GCMS                                   |
| Carbon Tetrachloride       | 56235      | California Toxics Rule, Ocean Plan                  | 0.25   | 0.90                                     | GC   |
| Chlorobenzene              | 108097     | Primary MCL, Ocean Plan                             | 70   | 570                                      | GC, GCMS                                   |
| Chlorodibromomethane       | 124481     | California Toxics Rule, Ocean Plan                  | 0.401  | 8.6                                      | GC   |
| Chloroethane               | 75003      | Primary MCL   | 300  | --                                       | GC, GCMS                                   |
| 2-Chloroethyl vinyl ether  | 110758     | No Criteria Available                               | --   | --                                       | GC, GCMS                                   |
| Chloroform                 | 67663      | National Toxics Rule, Ocean Plan                    | 5.7  | 130                                      | GC, GCMS                                   |
| Chloromethane              | 74873      | USEPA Health Advisory, Ocean Plan                   | 3  | 130 <sup>A</sup>                         | GC, GCMS                                   |
| Dichlorobromo-methane      | 75274      | California Toxics Rule, Ocean Plan                  | 0.56   | 6.2                                      | GC   |
| Dichloromethane            | 75092      | California Toxics Rule, Ocean Plan                  | 4.7  | 450                                      | GC, GCMS                                   |
| Ethylbenzene               | 100414     | Primary MCL, Ocean Plan                             | 300  | 4,100                                    | GC, GCMS                                   |
| Tetrachloroethene          | 127184     | National Toxics Rule, Ocean Plan                    | 0.8  | 2.0                                      | GC   |
| Toluene                    | 108883     | Primary MCL, Ocean Plan                             | 150  | 85,000                                   | GC, GCMS                                   |
| Trans-1,2 Dichloroethylene | 156605     | Primary MCL   | 10   | --                                       | GC   |
| Trichloroethene            | 79016      | National Toxics Rule, Ocean Plan                    | 2.7  | 27                                       | GC, GCMS                                   |
| Vinyl Chloride             | 75014      | Primary MCL, Ocean Plan                             | 0.5  | 36                                       | GC, GCMS                                   |

| Chemical Constituent             | CAS Number | Basis   | Inland Surface Waters, Enclosed Bays, and Estuaries Criteria (µg/L or noted) | Ocean Discharge Criteria (µg/L or noted) | Acceptable Analytical Methods <sup>B</sup> |
|----------------------------------|------------|---|--|--|--|
| <b>SEMI VOLATILES</b>            |            |   |  |  |  |
| 1,2 Benzanthracene               | 56553      | California Toxics Rule, Ocean Plan                  | 0.0044   | 0.0088 <sup>A</sup>                      | GCMS                                       |
| 1,2 Diphenylhydrazine            | 122667     | California Toxics Rule, Ocean Plan                  | 0.04   | 0.16                                     | GCMS                                       |
| 1,2,4 Trichlorobenzene           | 120821     | Public Health Goal                                  | 5  | --                                       | GC, GCMS                                   |
| 2 Chlorophenol                   | 95578      | California Toxics Rule                              | 120  | --                                       | GC, GCMS                                   |
| 2,4 Dichlorophenol               | 120832     | California Toxics Rule                              | 93   | --                                       | GC, GCMS                                   |
| 2,4 Dimethyphenol                | 105679     | CA Notification Level (DHS)                         | 100  | --                                       | GC, GCMS                                   |
| 2,4 Dinitrophenol                | 51285      | California Toxics Rule, Ocean Plan                  | 70   | 4.0                                      | GC, GCMS                                   |
| 2,4 Dinitrotoluene               | 121142     | California Toxics Rule, Ocean Plan                  | 0.11   | 2.6                                      | GCMS                                       |
| 2,4,6 Trichlorophenol            | 88062      | California Toxics Rule, Ocean Plan                  | 2.1  | 0.29                                     | GC, GCMS                                   |
| 2,6 Dinitrotoluene               | 606202     | National Ambient Water Quality Criteria             | 230  | ---                                      | GCMS                                       |
| 2-Nitrophenol                    | 25154557   | National Ambient Water Quality Criteria             | 150 <sup>C2</sup>  | --                                       | GCMS                                       |
| 2- Chloronaphthalene             | 91587      | National Ambient Water Quality Criteria             | 1600 <sup>C3</sup> / 7.5 <sup>F</sup>  | --                                       | GCMS                                       |
| 3,3' Dichlorobenzidine           | 91941      | California Toxics Rule, Ocean Plan                  | 0.04   | 0.0081                                   | GCMS                                       |
| 3,4 Benzofluoranthene            | 205992     | California Toxics Rule, Ocean Plan                  | 0.0044   | 0.0088 <sup>A</sup>                      | GCMS, LC                                   |
| 4 Chloro-3-methylphenol          | 59507      | National Ambient Water Quality Criteria             | 30   | --                                       | GC, GCMS                                   |
| 4,6 Dinitro-2-methylphenol       | 534521     | National Ambient Water Quality Criteria, Ocean Plan | 13.4   | 220                                      | GCMS                                       |
| 4-Nitrophenol                    | 100027     | National Ambient Water Quality Criteria             | 150  | --                                       | GC, GCMS                                   |
| 4-Bromophenyl phenyl ether       | 101553     | National Ambient Water Quality Criteria             | 122 <sup>C1</sup>  | --                                       | GC, GCMS                                   |
| 4-Chlorophenyl phenyl ether      | 7005723    | National Ambient Water Quality Criteria             | 122 <sup>C1</sup>  | --                                       | GCMS                                       |
| Acenaphthene                     | 83329      | National Ambient Water Quality Criteria             | 520 / 500 <sup>F</sup>   | --                                       | GC, GCMS, LC                               |
| Acenaphthylene                   | 208968     | National Ambient Water Quality Criteria, Ocean Plan | 300 <sup>F</sup>   | 0.0088 <sup>A</sup>                      | GCMS, LC                                   |
| Anthracene                       | 120127     | California Toxics Rule, Ocean Plan                  | 9600   | 0.0088 <sup>A</sup>                      | GCMS, LC                                   |
| Benzdine                         | 92875      | California Toxics Rule, Ocean Plan                  | 0.00012  | 6.9 x 10 <sup>-5</sup>                   | GCMS                                       |
| Benzo(a)pyrene (3,4 Benzopyrene) | 50328      | California Toxics Rule, Ocean Plan                  | 0.0044   | 0.0088 <sup>A</sup>                      | LC   |
| Benzo(g,h,i)perylene             | 191242     | National Ambient Water Quality Criteria, Ocean Plan | 300 <sup>F</sup>   | 0.0088 <sup>A</sup>                      | GCMS, LC                                   |
| Benzo(k)fluoranthene             | 207089     | California Toxics Rule, Ocean Plan                  | 0.0044   | 0.0088 <sup>A</sup>                      | LC   |
| Bis (2-Chloroethoxyl) methane    | 111911     | No Criteria Available, Ocean Plan                   | --   | 4.4                                      | GCMS                                       |
| Bis(2-chloroethyl) ether         | 111444     | California Toxics Rule, Ocean Plan                  | 0.031  | 0.045                                    | GCMS                                       |
| Bis(2-chloroisopropyl) ether     | 39638329   | National Ambient Water Quality Criteria, Ocean Plan | 122 <sup>C1</sup>  | 1,200                                    | GC, GCMS                                   |
| Bis(2-Ethylhexyl) phthalate      | 117817     | California Toxics Rule, Ocean Plan                  | 1.8  | 3.5                                      | GCMS                                       |
| Butyl benzyl phthalate           | 85687      | Basin Plan  | 2 <sup>C4</sup>  | --                                       | GC, GCMS                                   |
| Chlorine Residual, Total         | --         | Ocean Plan  | --   | 60                                       | COLOR                                      |
| Chrysene                         | 218019     | California Toxics Rule, Ocean Plan                  | 0.0044   | 0.0088 <sup>A</sup>                      | LC   |

| Chemical Constituent      | CAS Number | Basis   | Inland Surface Waters, Enclosed Bays, and Estuaries Criteria (µg/L or noted) | Ocean Discharge Criteria (µg/L or noted) | Acceptable Analytical Methods <sup>B</sup> |
|---------------------------|------------|---|--|--|--|
| Di-n-butylphthalate       | 84742      | Basin Plan, Ocean Plan                              | 2 <sup>C4</sup>  | 3,500                                    | GCMS                                       |
| Di-n-octylphthalate       | 117840     | Basin Plan  | 2 <sup>C4</sup>  | --                                       | GCMS                                       |
| Dibenzo(a,h)-anthracene   | 53703      | California Toxics Rule, Ocean Plan                  | 0.0044   | 0.0088 <sup>A</sup>                      | LC   |
| Diethyl phthalate         | 84662      | Basin Plan, Ocean Plan                              | 2 <sup>C4</sup>  | 33,000                                   | GC, GCMS                                   |
| Dimethyl phthalate        | 131113     | Basin Plan, Ocean Plan                              | 2 <sup>C4</sup>  | 820,000                                  | GC, GCMS                                   |
| Fluoranthene              | 206440     | California Toxics Rule, Ocean Plan                  | 300  | 15                                       | GC, GCMS, LC                               |
| Fluorene                  | 86737      | California Toxics Rule, Ocean Plan                  | 1300   | 0.0088 <sup>A</sup>                      | GCMS, LC                                   |
| Hexachlorocyclopentadiene | 77474      | National Ambient Water Quality Criteria, Ocean Plan | 5.2  | 58                                       | GC, GCMS                                   |
| Hexachlorobenzene         | 118741     | California Toxics Rule, Ocean Plan                  | 0.00075  | 2.1 x 10 <sup>-4</sup>                   | GCMS                                       |
| Hexachlorobutadiene       | 87683      | California Toxics Rule, Ocean Plan                  | 0.44   | 14                                       | GCMS                                       |
| Hexachloroethane          | 67721      | California Toxics Rule, Ocean Plan                  | 1.9  | 2.5                                      | GCMS                                       |
| Indeno(1,2,3-cd)pyrene    | 193395     | California Toxics Rule, Ocean Plan                  | 0.0044   | 0.0088 <sup>A</sup>                      | LC   |
| Isophorone                | 78591      | California Toxics Rule, Ocean Plan                  | 8.4  | 730                                      | GCMS                                       |
| N-Nitrosodiphenylamine    | 86306      | California Toxics Rule, Ocean Plan                  | 5  | 2.5                                      | GCMS                                       |
| N-Nitrosodimethylamine    | 62759      | California Toxics Rule, Ocean Plan                  | 0.00069  | 7.3                                      | GCMS                                       |
| N-Nitrosodi-n-propylamine | 621647     | California Toxics Rule, Ocean Plan                  | 0.005  | 0.38                                     | GCMS                                       |
| Naphthalene               | 91203      | Taste and Odor                                      | 21   | --                                       | GC, GCMS, LC                               |
| Nitrobenzene              | 98953      | California Toxics Rule, Ocean Plan                  | 17   | 4.9                                      | GC, GCMS                                   |
| Pentachlorophenol         | 87865      | California Toxics Rule                              | 0.28   | --                                       | GC   |
| Phenanthrene              | 85108      | National Ambient Water Quality Criteria, Ocean Plan | 300 <sup>C5,F</sup>  | 0.0088 <sup>A</sup>                      | GCMS, LC                                   |
| Phenol                    | 108352     | Basin Plan  | 1  | --                                       | GC, GCMS, COLOR                            |
| Pyrene                    | 129000     | California Toxics Rule, Ocean Plan                  | 960  | 0.0088 <sup>A</sup>                      | GCMS, LC                                   |
| <b>PESTICIDES</b>         |            |   |  |  |  |
| 2,4'-DDT                  | --         | Ocean Plan  | --   | 1.7 x 10 <sup>-4A</sup>                  | GC   |
| 2,4'-DDE                  | --         | Ocean Plan  | --   | 1.7 x 10 <sup>-4A</sup>                  | GC   |
| 2,4'-DDD                  | --         | Ocean Plan  | --   | 1.7 x 10 <sup>-4A</sup>                  | GC   |
| 4,4'-DDD                  | 72548      | California Toxics Rule,                             | 0.00083  | 1.7 x 10 <sup>-4A</sup>                  | GC   |
| 4,4'-DDE                  | 72559      | California Toxics Rule, Ocean Plan                  | 0.00059  | 1.7 x 10 <sup>-4A</sup>                  | GC   |
| 4,4'-DDT                  | 50293      | California Toxics Rule, Ocean Plan                  | 0.00059  | 1.7 x 10 <sup>-4A</sup>                  | GC   |
| alpha-Endosulfan          | 959988     | California Toxics Rule, Ocean Plan                  | 0.056 <sup>C6</sup> / 0.0087 <sup>C6,F</sup>                                 | 0.027 <sup>A</sup>                       | GC   |
| alpha-BHC                 | 319846     | California Toxics Rule, Ocean Plan                  | 0.0039   | 0.012 <sup>A</sup>                       | GC   |
| Aldrin                    | 309002     | California Toxics Rule, Ocean Plan                  | 0.00013  | 2.2 x 10 <sup>-5</sup>                   | GC   |
| beta-Endosulfan           | 33213659   | California Toxics Rule, Ocean Plan                  | 0.056 <sup>C6</sup> / 0.0087 <sup>C6,F</sup>                                 | 0.027 <sup>A</sup>                       | GC   |
| beta-BHC                  | 319857     | California Toxics Rule, Ocean Plan                  | 0.014  | 0.012 <sup>A</sup>                       | GC   |
| Chlordane                 | 57749      | CA Toxics Rule, Ocean Plan                          | 0.00057  | 2.3 x 10 <sup>-5</sup>                   | GC   |

| Chemical Constituent  | CAS Number | Basis  | Inland Surface Waters, Enclosed Bays, and Estuaries Criteria (µg/L or noted) | Ocean Discharge Criteria (µg/L or noted) | Acceptable Analytical Methods <sup>B</sup> |
|-----------------------|------------|--|--|--|--|
| delta-BHC             | 319868     | Ocean Plan   | --   | 0.012 <sup>A</sup>                       | GC   |
| Dieldrin              | 60571      | California Toxics Rule, Ocean Plan                       | 0.00014  | 4.0 x 10 <sup>-5</sup>                   | GC   |
| Endosulfan Sulfate    | 1031078    | National Ambient Water Quality Criteria, Ocean Plan      | 0.056 / 0.0087 <sup>F</sup>  | 0.009 <sup>A</sup>                       | GC   |
| Endrin                | 72208      | California Toxics Rule, Ocean Plan                       | 0.036 / 0.0023 <sup>F</sup>  | 0.002                                    | GC   |
| Endrin Aldehyde       | 7421934    | California Toxics Rule                                   | 0.76   | --                                       | GC   |
| Heptachlor            | 76448      | California Toxics Rule, Ocean Plan                       | 0.00021  | 5 x 10 <sup>-5</sup>                     | GC   |
| Heptachlor Epoxide    | 1024573    | California Toxics Rule, Ocean Plan                       | 0.0001   | 2 x 10 <sup>-5</sup>                     | GC   |
| Lindane (gamma-BHC)   | 58899      | California Toxics Rule, Ocean Plan                       | 0.019  | 0.012 <sup>A</sup>                       | GC   |
| Aroclor 1016          | 12674112   | California Toxics Rule, Ocean Plan                       | 0.0001 <sup>C7</sup>   | 1.9 x 10 <sup>-5A</sup>                  | GC   |
| Aroclor 1221          | 11104282   | California Toxics Rule, Ocean Plan                       | 0.00017 <sup>C7</sup>  | 1.9 x 10 <sup>A</sup>                    | GC   |
| Aroclor 1232          | 11141165   | California Toxics Rule, Ocean Plan                       | 0.00017 <sup>C7</sup>  | 1.9 x 10 <sup>A</sup>                    | GC   |
| Aroclor 1242          | 53469219   | California Toxics Rule, Ocean Plan                       | 0.00017 <sup>C7</sup>  | 1.9 x 10 <sup>A</sup>                    | GC   |
| Aroclor 1248          | 12672296   | California Toxics Rule, Ocean Plan                       | 0.00017 <sup>C7</sup>  | 1.9 x 10 <sup>A</sup>                    | GC   |
| Aroclor 1254          | 11097691   | California Toxics Rule, Ocean Plan                       | 0.00017 <sup>C7</sup>  | 1.9 x 10 <sup>A</sup>                    | GC   |
| Aroclor 1260          | 11096825   | California Toxics Rule, Ocean Plan                       | 0.00017 <sup>C7</sup>  | 1.9 x 10 <sup>A</sup>                    | GC   |
| Toxaphene             | 8001352    | California Toxics Rule, Ocean Plan                       | 0.0002   | 2.1 x 10 <sup>-4</sup>                   | GC   |
| 2,3,7,8-TCDD (Dioxin) | 1746016    | California Toxics Rule                                   | 1.30E-08   | --                                       | GC   |
| <b>INORGANICS</b>     |            |  |  |  |  |
| Ammonia as N          | 7664417    | Ocean Plan   | --   | 600                                      | --   |
| Antimony              | 7440360    | Primary MCL, Ocean Plan                                  | 6  | 1,200                                    | FAA, GFAA, ICPMS, SPGFAA, HYDRIDE          |
| Arsenic               | 7440382    | National Toxics Rule, Ocean Plan                         | 0.018  | 8  | GFAA, ICP, ICPMS, SPGFAA                   |
| Asbestos              | 1332214    | California Toxics Rule                                   | 7 MFL <sup>D</sup>   | --                                       | TEM  |
| Beryllium             | 7440417    | Primary MCL, Ocean Plan                                  | 4  | 0.033                                    | FAA, GFAA, ICP, ICPMS, SPGFAA, DCP         |
| Cadmium               | 7440439    | National Toxics Rule, Basin Plan, Ocean Plan             | 1 <sup>G</sup> / 0.2 <sup>E</sup>  | 1  | GFAA, ICPMS, SPGFAA                        |
| Chromium III          | 7440473    | Primary MCL, Ocean Plan                                  | 50 <sup>H</sup>  | 190,000                                  | FAA, GFAA, ICP, ICPMS, SPGFAA              |
| Chromium VI           | 18540299   | National Toxics Rule, Ocean Plan                         | 10   | 2  | FAA, COLOR                                 |
| Copper                | 7440508    | California Toxics Rule, National Toxics Rule, Ocean Plan | 9 <sup>G</sup> / 2.4 <sup>F,G</sup>  | 3  | GFAA, ICPMS, SPGFAA                        |
| Cyanide               | 57125      | CA Toxics Rule, Ocean Plan                               | 5.2 <sup>G</sup> / 1 <sup>F,G</sup>  | 10                                       | COLOR                                      |
| Lead                  | 7439921    | California Toxics Rule, Ocean Plan                       | 2.5 <sup>G</sup>   | 2  | ICPMS, SPGFAA                              |
| Mercury               | 7439976    | National Toxics Rule, Ocean Plan                         | 0.012  | 0.04                                     | CVAA                                       |

| Chemical Constituent          | CAS Number | Basis  | Inland Surface Waters, Enclosed Bays, and Estuaries Criteria (µg/L or noted) | Ocean Discharge Criteria (µg/L or noted) | Acceptable Analytical Methods <sup>B</sup> |
|-------------------------------|------------|--|--|--|--|
| Nickel                        | 7440020    | California Toxics Rule, Basin Plan, Ocean Plan | 52 <sup>G</sup> / 2 <sup>E1</sup>  | 5  | FAA, GFAA, ICP, ICPMS, SPGFAA              |
| Selenium                      | 7782492    | California Toxics Rule, Ocean Plan             | 5  | 15                                       | GFAA, ICPMS, SPGFAA, HYDRIDE               |
| Silver                        | 7440224    | California Toxics Rule, Ocean Plan             | 3.4 <sup>G</sup> / 1.9 <sup>F,G</sup>  | 0.7                                      | GFAA, ICPMS, SPGFAA                        |
| Thallium                      | 7440280    | California Toxics Rule, Ocean Plan             | 1.7  | 2  | ICPMS                                      |
| Zinc                          | 7440666    | National Toxics Rule, Basin Plan, Ocean Plan   | 100 <sup>G</sup> / 20 <sup>E</sup>   | 20                                       | FAA, ICP, ICPMS, SPGFAA                    |
| <b>OTHER PARAMETERS</b>       |            |  |  |  |  |
| Acute Toxicity                | --         | Ocean Plan                                     | --   | 0.3                                      | TUa  |
| Chronic Toxicity              | --         | Ocean Plan                                     | --   | 1  | Tuc  |
| Phenolic Compounds            | --         | Ocean Plan                                     | --   | 30                                       | µg/L                                       |
| Chlorinated Phenolics         | --         | Ocean Plan                                     | --   | 1  | µg/L                                       |
| Tributyltin                   | 688733     | Ocean Plan                                     | --   | 0.0014                                   | µg/L                                       |
| TCDD Equivalents <sup>I</sup> | --         | Ocean Plan                                     | --   | 3.9 x 10 <sup>-9</sup>                   | µg/L                                       |

**NOTES:**

A. Constituent Criteria shall mean the sum of:

| Constituent      | Criteria is Sum of Constituents  |
|------------------|--|
| dichlorobenzenes | 1,2 Dichlorobenzene and 1,3 Dichlorobenzene  |
| halomethanes     | Bromoform, Methyl Bromide, Chloromethane   |
| PAHs             | 1,2 Benzantracene, 3,4 Benzo(a)fluoranthene, Acenaphthylene, Anthracene, Benzo(a)pyrene (3,4 Benzopyrene), Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)-anthracene, Fluorene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene |
| DDT              | 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, 2,4-DDT, 2,4-DDE, 2,4-DDD  |
| Endosulfan       | alpha-Endosulfan, beta-Endosulfan, Endosulfan Sulfate  |
| HCH              | alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane  |
| PCBs             | Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260   |

B. For each constituent the Discharger may select one of the indicated analytical methods, which are described in 40 CFR 136.3. The abbreviations refer to the following:

- GC ..... Gas Chromatography
- GCMS ..... Gas Chromatography/Mass Spectrometry
- LC ..... High Pressure Liquid Chromatography
- FAA ..... Flame Atomic Absorption
- GFAA ..... Graphite Furnace Atomic Absorption
- Hydride ..... Gaseous Hydride Atomic Absorption
- CVAA ..... Cold Vapor Atomic Absorption
- ICP ..... Inductively Coupled Plasma
- ICPMS ..... Inductively Coupled Plasma/Mass Spectrometry
- SPGFAA ..... Stabilized Platform Graphite Furnace Atomic Absorption
- DCP ..... Direct Current Plasma
- TEM ..... Transmission Electron Microscopy
- COLOR ..... Colorimetric

- C. Indicate a regulatory decision that the cited concentration is either necessary or sufficient for full protection of beneficial uses or indicate meaning of uncommon acronyms
- C<sup>1</sup> – For haloethers
  - C<sup>2</sup> – For nitrophenols
  - C<sup>3</sup> – For chlorinated naphthalenes
  - C<sup>4</sup> – For phthalate esters
  - C<sup>5</sup> – For polynuclear aromatic hydrocarbons
  - C<sup>6</sup> – Criteria for sum of alpha and beta forms
  - C<sup>7</sup> – Criteria for sums of all PCBs
- D. MFL is defined as Million Fibers per Liter in the measurement of asbestos in water (EPA Method 600/R-93/116). Its detection limits are at 0.2 MFL of length greater than 10 microns
- E. Criteria for protection of Marine Habitat Beneficial Use (CCWB's Basin Plan)
- E<sup>1</sup> – value cited as objective pertains to nickel salts (not pure metallic nickel)
- F. Criteria only applies to discharges to saltwater inland surface waters, enclosed bays, and estuaries.
- G. Criteria values for metals are expressed as a function of a total hardness of 100 mg/L
- H. For total Chromium
- I. See "TCDD Equivalents" definition in Ocean Plan 2005

**STANDARD PROVISIONS****I. STANDARD PROVISIONS – PERMIT COMPLIANCE****A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. §122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. §122.41(a)(1).)

**B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. §122.41(c).)

**C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. §122.41(d).)

**D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. §122.41(e).)

**E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. §122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. §122.5(c).)

**F. Inspection and Entry**

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. §122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. §122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. §122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. §122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. §122.41(i)(4).)

**G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. §122.41(m)(1)(i).)
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. §122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. §122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. §122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. §122.41(m)(4)(i)(A));



- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. §122.41(m)(4)(i)(B)); and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. §122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. §122.41(m)(4)(ii).)
5. Notice
- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. §122.41(m)(3)(i).)
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. §122.41(m)(3)(ii).)

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. §122.41(n)(1).)

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. §122.41(n)(2).)
- 2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. §122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. §122.41(n)(3)(i));

- b. The permitted facility was, at the time, being properly operated (40 C.F.R. §122.41(n)(3)(ii));
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. §122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. §122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. §122.41(n)(4).)

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. §122.41(f).)

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. §122.41(b).)

### **C. Transfers**

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. §122.41(l)(3); § 122.61.)

## **III. STANDARD PROVISIONS – MONITORING**

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. §122.41(j)(1).)
- B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 C.F.R. §122.41(j)(4); § 122.44(i)(1)(iv).)

## **IV. STANDARD PROVISIONS – RECORDS**

- A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall

retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. §122.41(j)(2).)

**B. Records of monitoring information shall include:**

1. The date, exact place, and time of sampling or measurements (40 C.F.R. §122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 C.F.R. §122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 C.F.R. §122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 C.F.R. §122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 C.F.R. §122.41(j)(3)(v)); and
6. The results of such analyses. (40 C.F.R. §122.41(j)(3)(vi).)

**C. Claims of confidentiality for the following information will be denied (40 C.F.R. §122.7(b)):**

1. The name and address of any permit applicant or Discharger (40 C.F.R. §122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 C.F.R. §122.7(b)(2).)

**V. STANDARD PROVISIONS – REPORTING**

**A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. §122.41(h); CWC §13267.)

**B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. §122.41(k).)

2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. §122.22(a)(3).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. §122.22(b)(2)); and
  - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. §122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. §22.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. §122.22(d).)

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment A) in this Order. (40 C.F.R. §122.41(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. §122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. §122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. §122.41(l)(4)(iii).)

#### **D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. §122.41(l)(5).)

#### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. §122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. §122.41(l)(6)(ii)(A).)
  - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. §122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. §122.41(l)(6)(iii).)

**F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. §122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. §122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. §122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. §122.41(l)(1)(iii).)

**G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. §122.41(l)(2).)

**H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. §122.41(l)(7).)

**I. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. §122.41(l)(8).)

**VI. STANDARD PROVISIONS – ENFORCEMENT**

- A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, §13385, §13386, and §13387.

## D.4 Region 4. Los Angeles Regional Water Quality Control Board

Order No. R4-2013-0043. General NPDES Permit No. CAG914001 Waste Discharge Requirements for Discharges of Treated Groundwater from Investigation and/or Cleanup of Volatile Organic Compounds-Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties

Order No. R4-2013-0095. General NPDES Permit No. CAG994004 Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties

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Los Angeles Regional Water Quality Control Board

ORDER NO. R4-2013-0043  
GENERAL NPDES PERMIT NO. CAG914001

WASTE DISCHARGE REQUIREMENTS  
FOR  
DISCHARGES OF TREATED GROUNDWATER FROM INVESTIGATION  
AND/OR CLEANUP OF VOLATILE ORGANIC COMPOUNDS-CONTAMINATED SITES  
TO SURFACE WATERS  
IN  
COASTAL WATERSHEDS OF LOS ANGELES AND VENTURA COUNTIES

|  |               |
|--|---------------|
| This Order was adopted by the Regional Water Board on:   | March 7, 2013 |
| This Order shall become effective on:  | April 7, 2013 |
| This Order shall expire on:  | March 7, 2018 |
| The U.S. Environmental Protection Agency and the Regional Water Quality Control Board have classified discharges covered under this General NPDES Permit as a minor discharge. |               |

IT IS HEREBY ORDERED, that Order No. R4-2007-0022 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Samuel Unger, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on March 7, 2013.

  
\_\_\_\_\_  
Samuel Unger, P.E.  
Executive Officer

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## **I. DISCHARGE INFORMATION**

The presence of volatile organic compounds (VOCs) in the groundwater at various sites throughout the region causes, or threatens to cause, adverse impacts to existing and potential beneficial uses of the underlying groundwater. Remediation of these sites includes similar groundwater treatment and monitoring requirements. Waste discharges from these sites will be more efficiently regulated with a general permit rather than individual permits. Waste waters discharged from the investigation and/or cleanup of the groundwater involving VOCs contamination include, but are not limited to, the following:

- Treated groundwater from the cleanup and/or from construction dewatering activities at a site impacted by VOCs only, or by VOCs commingled with petroleum fuel hydrocarbons at an underground storage tank (UST) site. Such UST site may have storm water collected in fuel storage secondary containment tanks and fuel spill washwater that contains similar contaminants as those from the investigation/cleanup of VOCs contaminated groundwater.
- Groundwater pumped as an aid in the containment and extraction of VOCs-contaminated groundwater.
- Groundwater extracted during short-term and long-term pumping test/aquifer testing.
- Groundwater generated from well development and purging of wells prior to sampling.
- Sampling equipment decontamination water.
- Subterranean seepage dewatering.

Either aeration processes or adsorption processes (or combination of the two) are the treatment processes typically used to remove the VOCs from groundwater. When designed properly and operated efficiently, treatment systems using aeration or adsorption processes such as activated carbon can lower the concentration of VOCs and petroleum pollutants to below the detection limits. Limits established in the Order for VOCs and the petroleum pollutants can be met consistently if these treatment systems (or enhancements thereto) are properly operated and maintained.

## **II. NOTIFICATION REQUIREMENTS**

### **A. General Permit Application**

To be authorized to discharge under this Order, the Discharger must apply for enrollment under the General National Pollutant Discharge Elimination System (NPDES) permit by submitting to the Regional Water Board a Notice of Intent (NOI).

#### **1. Notice of Intent**

- a. Both Existing and New Dischargers eligible to seek coverage under the General NPDES Permit shall submit to the Executive Officer a complete NOI, including all information required by the NOI. The NOI is incorporated as Attachment C to this Order.
- b. The Discharger must obtain and analyze (using appropriate sampling and laboratory methods) a representative sample(s) of the untreated groundwater to be treated and discharged under this Order. The analytical method(s) used shall be capable of

achieving a detection limit at or below the minimum level<sup>1</sup>, otherwise, a written explanation shall be provided. The analytical results shall be submitted with the NOI. The data shall be tabulated and shall include the results for every constituent listed on Attachment E.

- c. Pursuant to section 2, Article X of the California Constitution, and section 275 of the California Water Code on preventing waste and unreasonable use of waters of the state, this Regional Water Board encourages, wherever practical, water conservation and/or reuse of wastewater. To obtain coverage under this Order, the Discharger shall first investigate the feasibility of conservation, reuse, injection of the groundwater, and/or alternative disposal methods of the wastewater. The Discharger shall include this feasibility study with the NOI.
- d. The NOI for a New Discharger shall be accompanied by an enrollment fee in accordance with the Section 2200 *Annual Fee Schedules* of California Code of Regulations Title 23, Division 3, Chapter 9. The check or money order shall be made payable to the "State Water Resources Control Board".
- e. Upon request, the Discharger shall submit any additional information that the Executive Officer deems necessary to determine whether the discharge meets the criteria for coverage under this Order, or to prescribe an appropriate monitoring and reporting program, or both.

## **2. Deadline for Submission**

- a. Renewal of NPDES permits for Existing Dischargers currently covered under individual permits, that meet the eligibility requirement for coverage under the General NPDES Permit and that have submitted a Report of Waste Discharge (ROWD) or an NOI will consist of a letter of determination from the Executive Officer of coverage under this Order.
- b. Existing Dischargers that were authorized to discharge under Order R4-2007-0022 will be sent an NOI form that must be completed and returned to the Regional Water Board within 60 days of receipt; otherwise, permit coverage may be revoked. Existing Dischargers enrolling under this Order are required to collect representative untreated groundwater sample(s) and analyze the samples for all the constituents listed on Attachment E. Dischargers shall conduct this analysis and submit the result with the NOI; otherwise, the existing authorization may be terminated. The discharge will be considered ineligible for enrollment, if the analytical test results of any constituent other than the pollutants with effluent limitations in Section V.A. exceeds the screening criteria in Attachment E. The discharger will be enrolled under other appropriate General NPDES Permit or an individual permit and the existing enrollment will be terminated.
- c. New Dischargers shall file a complete NOI at least 45 days before commencement of the discharge.

## **3. Failure to Submit a NOI**

Existing Dischargers who fail to submit a complete NOI by the deadline established herein will be deemed out of compliance with the General NPDES Permit and subject to all

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<sup>1</sup> The minimum levels are those published by the State Water Quality Control Board in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, 2005. See attached Appendix A.

penalties allowable pursuant to applicable provisions of the Clean Water Act and the California Water Code including Section 13261 thereof.

#### **4. Authorization of Coverage**

Upon receipt of the complete NOI, the Executive Officer shall determine the applicability of this Order to such a discharge. If the discharge is eligible, the Executive Officer shall notify the Discharger that the discharge is authorized under the terms and conditions of this Order and prescribe an appropriate monitoring and reporting program. For New Dischargers, the discharge shall not commence until receipt of the Executive Officer's written determination of eligibility for coverage under this General NPDES Permit. If necessary, for existing Discharger, the Executive Officer may require a Discharger to comply with the conditions of this General NPDES Permit even if the Discharger has not submitted an NOI to be covered by the General NPDES Permit.

#### **5. Notice of Start-Up**

New Dischargers shall notify the Regional Water Board staff of the time and date for commencement of the discharge(s) authorized under the General NPDES Permit at least seven days prior to initiating a discharge.

### **B. Eligibility Requirements**

#### **1. Eligibility**

- a.** This Order covers discharges to surface waters of treated groundwater and other wastewaters from the investigation, cleanup, or construction dewatering of VOCs only, or VOCs commingled with petroleum fuel contaminated groundwater.
- b.** To be covered under this Order, a Discharger must demonstrate that:
  - 1) Pollutant concentrations in the treated discharge do not cause a violation of any applicable water quality standard for the receiving water, including discharge prohibitions;
  - 2) The treated discharge does not exceed applicable water quality objectives and criteria for the pollutants listed in Section V.A (including Attachment B). of this Order, and there will be no reasonable potential to cause or contribute to an excursion above the applicable water quality objectives or criteria.
  - 3) Pollutant concentrations in a representative sample of the contaminated groundwater to be treated and discharged do not exceed the screening criteria in Attachment E, other than those constituents for which effluent limitations are established in Section II.A.
  - 4) The discharge does not cause acute or chronic toxicity in receiving waters;
  - 5) The discharge will be routed through a treatment system designed and operated to reduce the concentration of pollutants to meet the effluent limitations in this Order; and
  - 6) The Discharger is able to comply with the terms and conditions of this General NPDES Permit.

## **2. Ineligibility**

Groundwater containing priority toxic pollutants not limited in this permit are not eligible for coverage under this General NPDES Permit.

## **C. Exclusion of Coverage**

### **1. Termination of Discharge**

Dischargers shall submit a Notice of Termination (NOT) when coverage under this General NPDES Permit is no longer needed. An NOT is a letter or form that lists the Waste Discharge Identification Number (WDID), the Compliance Inspection # (CI #) the name and address of the owner of the facility, and is signed and dated by the owner certifying that the discharge associated with the General NPDES Permit has been eliminated. Upon submission, the Discharger is no longer authorized to discharge wastewater associated with this General NPDES Permit.

### **2. Change from Authorization Under General Permit to Individual Permit**

Dischargers already covered under the NPDES program, whether by general or individual permit, may elect to continue coverage under the existing permit or may submit a complete NOI for coverage under this General NPDES Permit. Dischargers who submit a complete NOI under this General NPDES Permit are not required to submit an individual permit application. The Regional Water Board may request additional information and may determine that a Discharger is not eligible for coverage under this General NPDES Permit and should be regulated under an individual or other general NPDES permit or, for discharges to land, under waste discharge requirements (WDRs). If the Regional Water Board issues such NPDES permit or WDRs, then the applicability of this General NPDES Permit to the discharge is immediately terminated on the effective date of such NPDES permit or WDRs.

### **3. Transferring Ownership**

Coverage under this Order may be transferred in case of change of ownership of land or discharge facility provided the current owner/operator notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the current and new owner/operator containing a specific date of transfer of coverage, responsibility for compliance with this Order, and liability between them.

## **D. Basis for Fee**

Title 23 of the California Code of Regulations (CCR), Division 3, Chapter 9, Article 1, section 2200, *Annual Fee Schedule*, requires that all discharges subject to a specific general permit shall pay an annual fee.

Discharges covered under this General NPDES Permit have a Threat to Water Quality rating of 1.A. Discharge coverage requires treatment systems to meet priority toxic pollutant effluent limitations that could impair the designated beneficial uses of the receiving water if limits are violated.

## **E. Notification of Interested Parties**

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

### **III. FINDINGS**

#### **A. Legal Authorities**

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA), and chapter 5.5, division 7 of the California Water Code (CWC, commencing with section 13370). It shall serve as an NPDES permit for point source discharges of wastewaters generated from the investigation or cleanup of volatile organic compounds (VOCs) in the groundwater to surface waters under the jurisdiction of the California Water Quality Control Board-Los Angeles Regional (Regional Water Board). This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

#### **B. Background**

The State Water Resources Control Board (State Water Board) has been authorized by the USEPA, pursuant to Section 402 of the CWA, to administer the NPDES program in California since 1973. The procedures for the State Water Board and the Regional Water Board to issue NPDES permits pursuant to NPDES regulations at section 122 & 123, title 40 of the Code of Federal Regulations<sup>2</sup>, were established through the NPDES Memorandum of Agreement between the USEPA and the State Water Board on September 22, 1989.

Section 122.28 provides for issuance of General NPDES permits to regulate a category of point sources if the sources: a) involve the same or substantially similar types of operations; b) discharge the same type of waste; c) require the same type of effluent limitations or operating conditions; d) require similar monitoring; and e) are more appropriately regulated under a general permit rather than individual permits. General NPDES permits enable Regional Water Board staff to expedite the processing of requirements, simplify the application process for Dischargers, better utilize limited staff resources, and avoid the expense and time involved in repetitive public noticing, hearings, and permit adoptions.

On April 5, 2007, this Regional Water Board adopted the General NPDES Permit and WDRs for Discharges of Volatile Organic Compound Contaminated Groundwater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (NPDES No. CAG914001, Order No. R4-2007-0022). The General NPDES Permit covers discharges of groundwater to surface waters resulting from the cleanup of VOCs contaminated-groundwater and similar discharges. Approximately 12 dischargers are currently enrolled under the General NPDES Permit.

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<sup>2</sup> All further regulatory references are to title 40 of the Code of Federal Regulations (or 40 CFR) unless otherwise indicated.



### C. Pollutants of Concern

The pollutants covered by the Order include, but not limited to:

|                              |                             |                        |
|------------------------------|-----------------------------|------------------------|
| acetone                      | acrolein                    | acrylonitrile          |
| benzene                      | bromoform                   | carbon tetrachloride   |
| chlorobenzene                | chlorodibromomethane        | chloroethane           |
| chloroform                   | dichlorobromomethane        | 1,1-dichloroethane     |
| 1,2-dichloroethane           | 1,1-dichloroethylene        | 1,2-dichloropropane    |
| 1,3-dichloropropylene        | di-isopropyl ether          | 1,4-dioxane            |
| ethylbenzene                 | ethylene dibromide          | lead                   |
| methyl bromide               | methyl chloride             | methylene chloride     |
| methyl ethyl ketone          | methyl tertiary butyl ether | naphthalene            |
| n-nitrosodimethyl amine      | perchlorate                 | tertiary butyl alcohol |
| 1,1,2,2-tetrachloroethane    | tetrachloroethylene         | toluene                |
| total petroleum hydrocarbons | 1,2-trans-dichloroethylene  | 1,1,1-trichloroethane  |
| 1,1,2-trichloroethane        | trichloroethylene           | vinyl chloride         |
| xylenes                      | residual chlorine           | chromium III           |
| chromium VI                  |                             |                        |

Only those VOCs of concern that show reasonable potential will be limited in the discharge, as specified in the Fact Sheet of the enrollment letter.

### D. Incorporation of Attachments

The Regional Water Board developed the requirements in this Order based on information submitted as part of the permit application, through monitoring and reporting reports, and other available information. The background information and rationale for the Order requirements are contained in Attachment F, Fact Sheet and constitutes part of the Findings for this Order, which is hereby incorporated into this Order. Attachments A through E are also incorporated into this Order.

### E. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

### F. Technology-Based Effluent Limitations

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet.

## **G. Water Quality-Based Effluent Limitations**

Section 301(b) of the CWA and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. 40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives or criteria within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric objective or criterion for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

The effluent limitations from groundwater cleanup projects regulated under this permit are calculated assuming no dilution. For most practical purposes, discharges from groundwater cleanups do not flow directly into receiving waters with enough volume to consider dilution credit or to allocate a mixing zone. Most discharges of treated groundwater regulated under this general permit are to storm drain systems that discharge to creeks and streams. Many of these creeks and streams are dry during the summer months. Therefore, for many months of the year, these discharges may represent all or nearly all of the flow in some portions of the receiving creeks or streams. These discharges, therefore, have the potential to recharge ground waters protected as drinking waters.

Because this Order is intended to serve as a general NPDES permit and covers discharges to all surface waters in the Los Angeles Region, the effluent limitations established pursuant to this general order are established to protect the most protective water quality objective or criterion for the designated surface water beneficial uses in the Los Angeles Region.

## **H. Watershed Management Approach and Total Maximum Daily Loads (TMDLs)**

The Regional Water Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Water Board's many diverse programs, particularly NPDES with TMDLs, to better assess cumulative impacts of pollutants from all point and nonpoint sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocations (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

Certain receiving waters in the Los Angeles watershed do not fully support beneficial uses and therefore have been classified as impaired on the 2010 303(d) list and have been scheduled for TMDL development. The USEPA partially approved the State's 2010 303(d) list of impaired

water bodies on November 12, 2010. The approved portion of the 2010 State Water Resources Control Board (State Water Board) California 303(d) List includes the classification of the San Gabriel River Estuary, to which Los Alamitos Channel is tributary, as impaired due to copper, dioxin, nickel, and dissolved oxygen. For dioxin, nickel, and dissolved oxygen, TMDL development is scheduled for 2021.

#### **I. Water Quality Control Plans**

The Regional Water Board has adopted a revised basin plan, *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan on Page 2-4 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

#### **J. Receiving Water Beneficial Uses**

The Basin Plan lists the designated beneficial uses of specific water bodies (receiving waters) in the Los Angeles Region. Typical beneficial uses covered by this Order include the following:

1. Inland surface waters above an estuary - municipal and domestic supply, industrial service and process supply, agricultural supply, groundwater recharge, freshwater replenishment, aquaculture, warm and cold freshwater habitats, inland saline water and wildlife habitats, water contact and noncontact recreation, fish migration, and fish spawning.
2. Inland surface waters within and below an estuary - industrial service supply, marine and wetland habitats, estuarine and wildlife habitats, water contact and noncontact recreation, commercial and sport fishing, aquaculture, migration of aquatic organisms, fish migration, fish spawning, preservation of rare and endangered species, preservation of biological habitats, and shellfish harvesting.
3. Coastal Zones (both nearshore and offshore) - industrial service supply, navigation, water contact and noncontact recreation, commercial and sport fishing, marine habitat, wildlife habitat, fish migration and spawning, shellfish harvesting, and rare, threatened, or endangered species habitat.

There are currently 60 USEPA-approved Total Maximum Daily Loads (TMDLs) for impaired waterbodies in the Los Angeles Region to reduce pollutants which are identified on California's 2010 303(d) list. These pollutants are classified into the categories of algae, bacteria, chloride, debris, metals, nutrients, salts, toxicity, toxics, and trash. All applicable TMDL requirements are implemented in this Order as effluent limitations and permit conditions.

#### **K. National Toxics Rule (NTR) and California Toxics Rule (CTR)**

USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

#### **L. State Implementation Policy**

On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

#### **M. Compliance Schedules and Interim Requirements (Not Applicable)**

The discharges covered under this Order applies exclusively to discharges from VOC-contaminated sites and as such the discharges from these sites are not expected to have issues in complying with the TMDLs prescribed effluent limitations in this Order. If a discharger cannot comply with the final TMDL limitations in this permit, then the discharger will be covered under an individual permit where compliance schedule is more appropriate. Therefore, this Order does not include either compliance schedule or Interim TMDLs and only appropriate final TMDLs have been prescribed.

#### **N. Endangered Species Act.**

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

#### **O. Alaska Rule**

On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

#### **P. Stringency of Requirements for Individual Pollutants**

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants that are no more stringent than required by CWA. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable

federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000.

#### **Q. Antidegradation Policy**

Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of Section 131.12 and State Water Board Resolution No. 68-16.

#### **R. Anti-Backsliding Requirements**

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order. Section 303(d)(4) of the CWA allows for backsliding if the less stringent limitations are based on a TMDL with the cumulative effect being that the limitations assure attainment of water quality standards in the receiving water for those specific parameters. Also, under 40 CFR 122.44(l)(2)(i)(B)(2) less stringent limitations are allowable when correcting technical mistakes or mistaken interpretations of law. This permit incorporates WQBELs based on TMDL WLAs for toxics and other pollutants adopted by the Regional Water Board and approved by USEPA under CWA section 303(d); these WQBELs supercede some effluent limits specified in the existing permit..

#### **S. Monitoring and Reporting**

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. A monitoring and reporting program (MRP) is tailored to each Discharger's individual situation and is provided with the General NPDES Permit coverage authorization letter signed by the Executive Officer of the Regional Water Board.

#### **T. Standard and Special Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the

attached Fact Sheet.

#### **U. Notification of Interested Parties**

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

#### **V. Consideration of Public Comment**

The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

### **IV. DISCHARGE PROHIBITIONS**

1. Discharges of any waste at a location different from that described in this Order are prohibited.
2. Discharges of any waste, other than those which meet eligibility requirements in Section II.B of this Order are prohibited, unless the Discharger is regulated for such discharges by another NPDES permit or discharges into a permitted facility.
3. Discharges of extracted and/or treated groundwater in excess of the flow rates authorized by the Executive Officer of the Regional Water Board are prohibited.
4. Discharges that contain any substances in concentrations toxic to human, animal, plant, or aquatic life are prohibited.
5. Discharges causing a violation of any applicable water quality standards for receiving waters as required by the CWA and regulations adopted thereunder are prohibited.
6. Pollution, contamination, or nuisance as defined by Section 13050 of the CWC, which are created by the treatment or the discharge of pollutants authorized under this Order, are prohibited.
7. Discharges of any radiological, chemical, or biological warfare agent or high level radiological waste are prohibited.
8. Bypass or overflow of untreated or partially treated contaminated groundwater to waters of the State either at the treatment system or from any of the collection or transport systems or pump stations tributary to the treatment system is prohibited.

### **V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

#### **A. Effluent Limitations**

1. Discharge of an effluent from the outfall location(s) listed in the enrollment authorization factsheet in excess of the following limitations is prohibited. In the authorization letter, when a Discharger is enrolled under this permit, the Executive Officer shall list in the factsheet each constituent from the appropriate effluent limitation table(s) below which is applicable to the Discharger's effluent.

**a. General Effluent Limitations**

**Table 1. Effluent Limitations Applicable to All Discharges**

| Parameters                      | Units | Effluent Limitations |               |
|---------------------------------|-------|----------------------|---------------|
|                                 |       | Average Monthly      | Maximum Daily |
| Total Suspended Solids          | mg/L  | 50                   | 75            |
| Turbidity                       | NTU   | 50                   | 75            |
| BODs 20 °C                      | mg/L  | 20                   | 30            |
| Oil and Grease                  | mg/L  | 10                   | 15            |
| Settleable Solids               | ml/L  | 0.1                  | 0.3           |
| Sulfides                        | mg/L  |                      | 1.0           |
| Phenols                         | mg/L  |                      | 1.0           |
| Residual Chlorine               | mg/L  |                      | 0.1           |
| Acetone                         | µg/L  |                      | 700           |
| Acrolein                        | µg/L  |                      | 100           |
| Acrylonitrile                   | µg/L  |                      | 0.059         |
| Benzene                         | µg/L  |                      | 1.0           |
| Bromoform                       | µg/L  |                      | 4.3           |
| Carbon tetrachloride            | µg/L  |                      | 0.25*         |
| Chlorobenzene                   | µg/L  |                      | 30            |
| Chlorodibromomethane            | µg/L  |                      | 0.401*        |
| Chloroethane                    | µg/L  |                      | 100           |
| Chloroform                      | µg/L  |                      | 100           |
| Dichlorobromomethane            | µg/L  |                      | 0.56          |
| 1, 1-Dichloroethane             | µg/L  |                      | 5             |
| 1,2-Dichloroethane              | µg/L  |                      | 0.38*         |
| 1, 1-Dichloroethylene           | µg/L  |                      | 0.057*        |
| 1,2-Dichloropropane             | µg/L  |                      | 0.52          |
| 1,3-Dichloropropylene           | µg/L  |                      | 0.5           |
| Di-isopropyl ether (DIPE)       | µg/L  |                      | 0.8           |
| 1,4-Dioxane                     | µg/L  |                      | 3             |
| Ethylbenzene                    | µg/L  |                      | 700           |
| Ethylene dibromide              | µg/L  |                      | 0.05*         |
| Lead, Total Recoverable         | µg/L  | 2.6                  | 5.2           |
| Chromium III, Total Recoverable | µg/L  | 50                   | 50            |
| Chromium VI, Total Recoverable  | µg/L  | 8                    | 16            |
| Methyl bromide                  | µg/L  |                      | 10            |

| Parameters  | Units | Effluent Limitations |               |
|---|-------|----------------------|---------------|
|   |       | Average Monthly      | Maximum Daily |
| Methyl chloride   | µg/L  |                      | 3             |
| Methylene chloride  | µg/L  |                      | 4.7           |
| Methyl ethyl ketone (MEK)   | µg/L  |                      | 700           |
| Methyl tertiary butyl ether (MTBE)  | µg/L  |                      | 5             |
| Naphthalene   | µg/L  |                      | 21            |
| N-Nitrosodimethyl amine (NDMA)  | µg/L  |                      | 0.00069*      |
| Perchlorate   | µg/L  |                      | 6             |
| Tertiary butyl alcohol (TBA)  | µg/L  |                      | 12            |
| 1,1,2,2- Tetrachloroethane  | µg/L  |                      | 0.17*         |
| Tetrachloroethylene   | µg/L  |                      | 0.8           |
| Toluene   | µg/L  |                      | 150           |
| Total petroleum hydrocarbons*   | µg/L  |                      | 100           |
| 1,2- Trans-trichloroethylene  | µg/L  |                      | 10            |
| 1,1,1- Trichloroethane  | µg/L  |                      | 200           |
| 1,1,2- Trichloroethane  | µg/L  |                      | 0.60          |
| Trichloroethylene   | µg/L  |                      | 2.7           |
| Vinyl chloride  | µg/L  |                      | 0.5           |
| Xylenes   | µg/L  |                      | 1750          |
| <p>NOTE: *. If the reported MDL is greater than the effluent limitation, then a non-detect result using an MDL of 0.5 µg/L is deemed to be in compliance.</p> <p>**.. Toxicity of this chemical increases with decreasing hardness concentration. The figure in the table is determined based on effluent CaCO<sub>3</sub> concentration of 100 mg/L.</p> |       |                      |               |



**b. WQBELs based on TMDL WLAs**

**Table 2. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL WLAs, Dry Weather<sup>3</sup>**

| Reach                                       | Units | Copper, TR    |                 | Lead, TR      |                 | Zinc, TR      |                 | Selenium, TR  |                 |
|---|-------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|
|   |       | Maximum Daily | Average Monthly | Maximum Daily | Average Monthly | Maximum Daily | Average Monthly | Maximum Daily | Average Monthly |
| Reach 5 and 6 and Bell Creek                | µg/L  | 49            | 25              | 31            | 16              |               |                 | 8.2           | 4.1             |
| Reach 4                                     | µg/L  | 43            | 21              | 16            | 8.2             |               |                 |               |                 |
| Reach 3 above LA-Glendale WRP and Verdugo   | µg/L  | 38            | 19              | 20            | 9.8             | ---           | ---             | ---           | ---             |
| Reach 3 below LA-Glendale WRP               | µg/L  | 43            | 21              | 20            | 9.8             | ---           | ---             | ---           | ---             |
| Burbank Western Channel (above Burbank WRP) | µg/L  | 43            | 21              | 23            | 11              | ---           | ---             | ---           | ---             |
| Burbank Western Channel (below Burbank WRP) | µg/L  | 31            | 16              | 15            | 7.4             | ---           | ---             | ---           | ---             |
| Reach 2 and Arroyo Seco                     | µg/L  | 36            | 18              | 18            | 9               | ---           | ---             | ---           | ---             |
| Reach 1                                     | µg/L  | 38            | 19              | 20            | 9.8             | ---           | ---             | ---           | ---             |
| Compton Creek                               | µg/L  | 31            | 16              | 15            | 7.3             | ---           | ---             | ---           | ---             |
| Rio Hondo Rch. 1                            | µg/L  | 21            | 11              | 8.2           | 4.1             | 210           | 110             | ---           | ---             |

**Table 3. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL WLAs, Wet Weather<sup>4</sup>**

| Constituents | Units | Effluent Limitations |                 |
|--------------|-------|----------------------|-----------------|
|              |       | Maximum Daily        | Average Monthly |
| Cadmium, TR  | µg/L  | 3.1                  | 1.5             |
| Copper, TR   | µg/L  | 17                   | 8.5             |
| Lead, TR     | µg/L  | 62                   | 31              |
| Zinc, TR     | µg/L  | 160                  | 79              |

<sup>3</sup> For purposes of this general permit, discharges occurring from April 15th through November 15th are considered dry weather discharges.

<sup>4</sup> For purposes of this general permit, discharges occurring from November 14<sup>th</sup> through April 14<sup>th</sup> are considered wet weather discharges.

**Table 4. WQBELs based on Basin Plan section 7-39 - Los Angeles River Watershed Bacteria TMDL WLAs**

| Constituents          | Units      | Effluent Limitations   |               |
|-----------------------|------------|------------------------|---------------|
|                       |            | Geometric Mean Monthly | Maximum Daily |
| <i>E.coli</i> density | MPN/100 mL | 126                    | 235           |

**Table 5. WQBELs based on Basin Plan section 7-12 - Ballona Creek Metals TMDL WLAs**

| Constituents | Units | Dry Weather Effluent Limitations |                 | Wet Weather Effluent Limitations |                 |
|--------------|-------|----------------------------------|-----------------|----------------------------------|-----------------|
|              |       | Maximum Daily                    | Average Monthly | Maximum Daily                    | Average Monthly |
| Copper, TR   | µg/L  | 39                               | 20              | 18                               | 9               |
| Lead, TR     | µg/L  | 21                               | 11              | 59                               | 29              |
| Selenium, TR | µg/L  | 8.2                              | 4.1             | 5                                | 2.5             |
| Zinc, TR     | µg/L  | 304                              | 151             | 119                              | 59              |

**Table 6. WQBELs based on USEPA's Los Cerritos Channel Metal TMDL**

| Constituents | Units | Dry Weather Effluent Limitations |                 | Wet Weather Effluent Limitations |                 |
|--------------|-------|----------------------------------|-----------------|----------------------------------|-----------------|
|              |       | Maximum Daily                    | Average Monthly | Maximum Daily                    | Average Monthly |
| Copper, TR   | µg/L  | 31                               | 16              | 9.8                              | 4.8             |
| Lead, TR     | µg/L  |                                  |                 | 59                               | 28              |
| Zinc, TR     | µg/L  |                                  |                 | 96                               | 48              |

**Table 7. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs, WET Weather<sup>5</sup>**

| Constituent | Units                    | Effluent Limitations |                 |
|-------------|--------------------------|----------------------|-----------------|
|             |                          | Maximum Daily        | Average Monthly |
| Copper, TR  | µg/L (water, unfiltered) | 9.7                  | 4.8             |
| Lead, TR    | µg/L (water, unfiltered) | 43                   | 21              |
| Zinc, TR    | µg/L                     | 70                   | 35              |

<sup>5</sup> Exceedances of California Toxic Rule (CTR) criteria for metals were only observed in freshwaters of Dominguez Channel during wet weather; therefore, WQBELs are set for wet weather only.

**Table 8. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs**

| Constituent | Units | Dominguez Channel Estuary |                 | Greater Harbor Waters |                 |
|-------------|-------|---------------------------|-----------------|-----------------------|-----------------|
|             |       | Maximum Daily             | Average Monthly | Maximum Daily         | Average Monthly |
| Copper, TR  | µg/L  | 6.1                       | 3               | 6.1                   | 3               |
| Lead, TR    | µg/L  | 14                        | 7               | 14                    | 7               |
| Zinc, TR    | µg/L  | 140                       | 70              | 140                   | 70              |
| PAHs        | µg/L  | 0.098                     | 0.049           |                       |                 |
| Chlordane   | µg/L  | 0.0012                    | 0.00059         | ---                   | ---             |
| 4,4'-DDT    | µg/L  | 0.0012                    | 0.00059         | 0.0012                | 0.00059         |
| Dieldrin    | µg/L  | 0.00028                   | 0.00014         | ----                  | ---             |
| Total PCBs  | µg/L  | 0.00034                   | 0.00017         | 0.00034               | 0.00017         |

**Table 9. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Dry Weather<sup>6</sup>**

| Reaches                 | Units | Copper, TR    |                 | Selenium, TR  |                 |
|-------------------------|-------|---------------|-----------------|---------------|-----------------|
|                         |       | Maximum Daily | Average Monthly | Maximum Daily | Average Monthly |
| SJC R-1, 2 <sup>1</sup> | µg/L  |               |                 | 8.2           | 4.1             |
| SGR R-1 <sup>2</sup>    | µg/L  | 30            | 15              |               |                 |
| SGR R 2 <sup>3</sup>    | µg/L  |               |                 |               |                 |
| Coyote Creek            | µg/L  | 33            | 16              |               |                 |
| Estuary                 | µg/L  | 5.1           | 2.5             |               |                 |

1. San Jose Creek Reach 1 (Confluence to Temple Street) and San Jose Reach 2 (Temple Street to I-10 Freeway at White Avenue)
2. San Gabriel River Reach 1 (Firestone Avenue to Estuary).
3. San Gabriel River Reach 2 (Whittier Narrows to Firestone Avenue), and upstream reaches and tributaries

<sup>6</sup> Defined in the Footnote 3.

**Table 10. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Wet-Weather<sup>7</sup>**

| Reaches                 | Units | Copper, TR    |                 | Lead, TR      |                 | Zinc, TR      |                 |
|-------------------------|-------|---------------|-----------------|---------------|-----------------|---------------|-----------------|
|                         |       | Maximum Daily | Average Monthly | Maximum Daily | Average Monthly | Maximum Daily | Average Monthly |
| SJC R-1, 2 <sup>1</sup> | µg/L  |               |                 |               |                 |               |                 |
| SGR R-1 <sup>2</sup>    | µg/L  |               |                 |               |                 |               |                 |
| SGR R 2 <sup>3</sup>    | µg/L  |               |                 | 166           | 83              |               |                 |
| Coyote Creek            | µg/L  | 15            | 7.5             | 87            | 43              | 125           | 62              |
| Estuary                 | µg/L  |               |                 |               |                 |               |                 |

1. San Jose Creek Reach 1 (Confluence to Temple Street) and San Jose Reach 2 (Temple Street to I-10 Freeway at White Avenue)
2. San Gabriel River Reach 1 (Firestone Avenue to Estuary).
3. San Gabriel River Reach 2 (Whittier Narrows to Firestone Avenue), and upstream reaches and tributaries

**Table 11. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs – Dry Weather**

| Reaches                              | Units | Copper <sup>1, 2</sup> |                 | Nickel <sup>3</sup> |                 | Selenium      |                 |
|--------------------------------------|-------|------------------------|-----------------|---------------------|-----------------|---------------|-----------------|
|                                      |       | Maximum Daily          | Average Monthly | Maximum Daily       | Average Monthly | Maximum Daily | Average Monthly |
| 1-Mabu Lagoon                        | µg/L  | 6.1                    | 3.0             | 13.5                | 6.7             | ----          | -----           |
| 2-Calleguas Creek South              | µg/L  | 6.1                    | 3.0             | 13.5                | 6.7             | ----          | -----           |
| 3-Revolon Slough                     | µg/L  | 44                     | 22              | 244                 | 122             | ----          | -----           |
| 4-Calleguas Creek North              | µg/L  | 6.1                    | 3.0             | 13.6                | 6.8             | 8.2           | 4.1             |
| 5-Beardsley Channel                  | µg/L  | 6.1                    | 3.0             | 13.6                | 6.8             | 8.2           | 4.1             |
| 9-Conejo Creek                       | µg/L  | 48                     | 24              | 262                 | 131             | ----          | -----           |
| 10-Hill Canyon reach of Conejo Creek | µg/L  | 48                     | 24              | 262                 | 131             | ----          | -----           |
| 11-Arroyo Santa Rosa                 | µg/L  | 48                     | 24              | 262                 | 131             | ----          | -----           |
| 12-North Fork Conejo Creek           | µg/L  | 48                     | 24              | 262                 | 131             | ----          | -----           |
| 13-Arroyo Conejo (S.Fork Conejo Cr)  | µg/L  | 48                     | 24              | 262                 | 131             | ----          | -----           |

Notes:

1. Site Specific Water-Effect Ratios (WER) for copper have been developed by Regional Board for Reach1 (WER = 1.51) and Reach 2 (WER = 3.69). The effluent limitations for copper for these two reaches have been recalculated based on WERs.
2. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.96 for freshwater reaches and 0.83 for salt water reaches.
3. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.997 for freshwater reaches and 0.99 for salt water reaches.

<sup>7</sup> Defined in the Footnote 4.

**Table 12. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs –Wet Weather**

| Reaches                              | Units | Copper <sup>1,2</sup> |                 | Nickel <sup>3</sup> |                 | Selenium      |                 |
|--------------------------------------|-------|-----------------------|-----------------|---------------------|-----------------|---------------|-----------------|
|                                      |       | Maximum Daily         | Average Monthly | Maximum Daily       | Average Monthly | Maximum Daily | Average Monthly |
| 1-Mabu Lagoon                        | µg/L  | 5.8                   | 2.9             | 74                  | 37              | ----          | -----           |
| 2-Calleguas Creek South              | µg/L  | 5.8                   | 2.9             | 74                  | 37              | ----          | -----           |
| 3-Revolon Slough                     | µg/L  | 27.4                  | 13.7            | 858                 | 427             | ----          | -----           |
| 4-Calleguas Creek North              | µg/L  | 5.8                   | 2.9             | 75                  | 37              | 289           | 144             |
| 5-Beardsley Channel                  | µg/L  | 5.8                   | 2.9             | 75                  | 37              | 289           | 144             |
| 9-Conejo Creek                       | µg/L  | 31                    | 15              | 956                 | 477             | ----          | -----           |
| 10-Hill Canyon reach of Conejo Creek | µg/L  | 31                    | 15              | 956                 | 477             | ----          | -----           |
| 11-Arroyo Santa Rosa                 | µg/L  | 31                    | 15              | 956                 | 477             | ----          | -----           |
| 12-North Fork Conejo Creek           | µg/L  | 43                    | 21              | 1294                | 645             | ----          | -----           |
| 13-Arroyo Conejo (S.Fork Conejo Cr)  | µg/L  | 43                    | 21              | 1294                | 645             | ----          | -----           |

Notes:

1. Site Specific Water-Effect Ratios (WER) for copper have been developed by Regional Board for Reach1 (WER = 1.51) and Reach 2 (WER = 3.69). The effluent limitations for copper for these two reaches have been recalculated based on WERs.
2. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.96 for freshwater reaches and 0.83 for salt water reaches.
3. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.997 for freshwater reaches and 0.99 for salt water reaches.

**Table 13. WQBELs based on Basin Plan section 7-17 - Calleguas Creek Organochlorine Pesticides, Polychlorinated Biphenyls, and Siltation TMDL WLAs**

| Constituents | Units | Effluent Limitations |                 |
|--------------|-------|----------------------|-----------------|
|              |       | Maximum Daily        | Average Monthly |
| Chlordane    | ng/L  | 1.2                  | 0.59            |
| 4,4-DDD      | ng/L  | 1.7                  | 0.84            |
| 4,4-DDE      | ng/L  | 1.2                  | 0.59            |
| 4,4-DDT      | ng/L  | 1.2                  | 0.59            |
| Dieldrin     | ng/L  | 0.28                 | 0.14            |
| PCBs         | ng/L  | 0.34                 | 0.17            |
| Toxaphene    | ng/L  | 0.33                 | 0.16            |

**Table 14. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs –Dry and Wet Weather**

| Constituents | Units | Effluent Limitations |                 |
|--------------|-------|----------------------|-----------------|
|              |       | Maximum Daily        | Average Monthly |
| Mercury      | µg/L  | 0.1                  | 0.051           |

**Table 15. Calleguas Creek, Its Tributaries, and Magu Lagoon Toxicity TMDL**

| Pollutant | Units               | Effluent Limitations |
|-----------|---------------------|----------------------|
| Toxicity  | Toxicity Unit (TUc) | 1                    |

**Table 16. Calleguas Creek, Its Tributaries, and Magu Lagoon TMDL for organophosphate pesticides (Chlorpyrifos and Diazinon)**

| Parameters   | Units | Effluent Limitations |       |         |
|--------------|-------|----------------------|-------|---------|
|              |       | 4 Day Average        | Acute | Chronic |
| Chlorpyrifos | µg/L  | 0.014                | ----  | ----    |
| Diazinon     | µg/L  | ----                 | 0.10  | 0.10    |

**Table 17. WQBELs based on Basin Plan section 7-10 Malibu Creek and Lagoon, section 7-11 Los Angeles Harbor (Inner Cabrillo Beach and Main Ship Channel), section 7-5 Marina del Rey Harbor Mothers' Beach and Back Basin, section 7-28 Harbor Beaches of Ventura County (Kiddie Beach and Hobie Beach), section 7-36 Santa Clara River Estuary and Reaches 3,5,6, and 7, and USEPA's Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL WLAs**

| Parameters            | Units      | Effluent Limitations   |               |
|-----------------------|------------|------------------------|---------------|
|                       |            | Geometric Mean Monthly | Maximum Daily |
| Total Coliform (T)    | MPL/100 mL | 1,000                  | 10,000        |
| Fecal Coliform (F)    | MPL/100 mL | 200                    | 400           |
| Enterococcus          | MPL/100 mL | 35                     | 104           |
| If ratio of F/T > 0.1 | MPL/100 mL | ---                    | 1,000         |

**Table 18. WQBELs based on Basin Plan section 7-14 - Ballona Creek Estuary Toxic Pollutants TMDL WLAs in Sediment**

| Constituents | Units     | Effluent Limitations* |
|--------------|-----------|-----------------------|
| Cadmium      | mg/kg dry | 1.2                   |
| Copper       | mg/kg dry | 34                    |
| Lead         | mg/kg dry | 46.7                  |
| Silver       | mg/kg dry | 1.0                   |
| Zinc         | mg/kg dry | 150                   |
| Chlordane    | µg/kg dry | 0.5                   |
| DDTs         | µg/kg dry | 1.58                  |
| Total PCBs   | µg/kg dry | 22.7                  |
| Total PAHs   | µg/kg dry | 4,022                 |

\*: See Section VIII. H. for compliance determination.

**Table 19. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs in Sediment**

| Waterbody                                    | Effluent Limitations (mg/kg)* |      |       |
|--|-------------------------------|------|-------|
|  | Lead                          | Zinc | PAHs  |
| Long Beach Outer Harbor (inside breakwater)  | 46.7                          | 150  | 4.022 |
| Los Angeles Outer Harbor (inside breakwater) | 46.7                          | 150  | 4.022 |
| Los Angeles River Estuary                    | 46.7                          |      | 4.022 |
| Los Angeles Harbor–Inner Cabrillo Beach Area | 46.7                          |      | 4.022 |

\*: See Section VIII. H. for compliance determination.

**Table 20. WQBELs based on Basin Plan section 7-18 - Marina del Rey Harbor Toxic Pollutants TMDLWLAs in Sediment**

| Constituent | Units | Effluent Limitations* |
|-------------|-------|-----------------------|
| Copper      | mg/kg | 34                    |
| Lead        | mg/kg | 46.7                  |
| Zinc        | mg/kg | 150                   |
| Chlordane   | µg/kg | 0.5                   |
| Total PCBs  | µg/kg | 22.7                  |

\*: See Section VIII. H. for compliance determination.

- The pH of the discharge shall at all times be within the range of 6.5 and 8.5.
- The temperature of the discharge shall not exceed 86°F.
- The discharge of an effluent with mineral and nitrogen constituents in excess of applicable limits given in Attachment B is prohibited. In the letter of determination, the Executive Officer shall indicate the WQBELs in Attachment B for watershed/stream

reach mineral objectives applicable to the particular discharge.

5. Pass-through or uncontrollable discharges of PCBs shall not exceed daily average concentrations of 14 ng/L into fresh waters or 30 ng/L into estuarine waters.
6. The acute toxicity of the effluent shall be such that the average monthly survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test less than 70% survival.
7. The discharge shall meet effluent limitations and toxic and effluent standards established pursuant to sections 301, 302, 304, 306, and 307 of the CWA, and amendments thereto.

**B. Land Discharge Specifications (Not Applicable)**

**C. Reclamation Specifications (Not Applicable)**

**VI. RECEIVING WATER LIMITATIONS**

**A. Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the receiving waterbody.

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.2 units.
2. Surface water temperature to rise greater than 5° F above the natural temperature of the receiving waters at any time or place. At no time shall the temperature be raised above 80° F as a result of waste discharged.
3. The waste discharged shall not cause the log mean limits of bacteria to be exceeded in Table 21 for freshwater receiving water and in Table 22 for saltwater receiving water with REC-1 designated beneficial use.

**Table 21. Freshwater Bacteria Limitations**

| Parameters                    | Units      | Receiving Water Limitations |               |
|-------------------------------|------------|-----------------------------|---------------|
|                               |            | Geometric Mean              | Single Sample |
| E. coli                       | MPN/100 mL | 126                         | 235           |
| E. coli* (Ballona Creek only) | MPN/100 mL | 126                         | 576           |

\*: E. coli limitations for Ballona Creek with designated beneficial use of Limited Contact Recreation (LREC-1).



**Table 22. Saltwater Water Bacteria Limitations**

| Parameters                    | Units      | Receiving Water Limitations |               |
|-------------------------------|------------|-----------------------------|---------------|
|                               |            | Geometric Mean              | Single Sample |
| Total Coliform                | MPN/100 mL | 1,000                       | 10,000        |
| Fecal Coliform                | MPN/100 mL | 200                         | 400           |
| Enterococcus                  | MPN/100 mL | 35                          | 104           |
| If Fecal/Total Coliform > 0.1 | MPN/100 mL | - - -                       | 1,000         |

4. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
5. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution No. 2004-022. Resolution No. 2004-022 revised the ammonia water quality objectives for inland surface waters not characteristic of freshwater in the 1994 Basin Plan, to be consistent with USEPA's "*Ambient Water Quality Criteria for Ammonia (Saltwater) - 1989*". Adopted on March 4, 2004, Resolution No. 2004-022 was approved by State Water Board, OAL and USEPA on July 22, 2004, September 14, 2004, and May 19, 2005, respectively and is now in effect.
6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
7. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
8. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
9. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
10. Accumulation of bottom deposits or aquatic growths.
11. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
13. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
14. Alteration of turbidity, or apparent color beyond present natural background levels.
15. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.

16. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
18. Create nuisance, or adversely affect beneficial uses of the receiving water.
19. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

**B. Groundwater Limitations (Not Applicable)**

**VII. PROVISIONS**

Standard Provisions, which apply to all NPDES permits in accordance with Section 122.41 & 122.42, are included in this Order. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under Section 122.42. The Regional Water Board has also provided in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

**A. Standard Provisions**

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. The Discharger shall comply with the following provisions:
  - a. The Executive Officer may require any discharger authorized under this Order to apply for and obtain an individual NPDES permit with more specific requirements. The Executive Officer may require any discharger authorized to discharge under this permit to apply for an individual permit only if the discharger has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of the individual permit, the authority to discharge under this general permit is no longer applicable.
  - b. The discharger shall comply with all the applicable items of the Standard Provisions and Reporting for Waste Discharge Requirements (Standard Provisions), which are part of this general permit (Attachment D). If there is any conflict between provisions stated herein and the Standard Provisions, those provisions stated herein prevail.
  - c. Prior to application, the discharger shall submit for Executive Officer's approval the list of chemicals and proprietary additives that may affect the discharge, including rates/quantities of application, compositions, characteristics, and material safety data sheets, if any.
  - d. Oil or oily materials, chemicals, refuse, or other materials that may cause pollution in storm water and/or urban runoff shall not be stored or deposited in areas where they may be picked up by rainfall/urban runoff and discharged to surface waters. Any spill of such materials shall be contained, removed and cleaned immediately.

- e. This Order neither exempts the discharger from compliance with any other laws, regulations, or ordinances that may be applicable, nor legalizes the waste disposal facility.
- f. The discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.
- g. Any discharge authorized under this Order may request to be excluded from the coverage of this Order by applying for an individual permit.
- h. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from treatment facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

## **B. Monitoring and Reporting Program Requirements**

The Executive Officer is hereby authorized to prescribe a Monitoring and Reporting Program for each authorized discharger. The Discharger shall comply with the MRP accompanying the transmittal for enrollment under this General NPDES permit, and future revisions thereto. If there is any conflict between provisions stated in the MRP and the Regional Water Board Standard Provisions, those provisions stated in the MRP shall prevail.

## **C. Special Provisions**

### **1. Reopener Provisions**

- a. This Order may be modified, revoked and reissued, or terminated for cause. Reasons for modification may include new information on the impact of discharges regulated under this Order become available, promulgation of new effluent standards and/or regulations, adoption of new policies and/or water quality objectives, and/or new judicial decisions affecting requirements of this Order.
- b. Pursuant to 40 CFR sections 122.62 and 122.63, this Order may be modified, revoked and reissued, or terminated for cause. Reasons for modification may include new information on the impact of discharges regulated under this Order become available, promulgation of new effluent standards and/or regulations, adoption of new policies and/or water quality objectives, and/or new judicial decisions affecting requirements of this Order. In addition, if receiving water quality is threatened due to discharges covered under this permit, this permit will be reopened to incorporate more stringent effluent limitations for the constituents creating the threat. TMDLs have not been developed for all the parameters and receiving waters on the 303(d) list. When TMDLs are developed this permit may be reopened to incorporate appropriate limits. In addition, if a TMDL identifies that a particular discharge covered under this permit is a load that needs to be reduced; this permit will be reopened to incorporate appropriate TMDL based limit and/or to remove any applicable exemptions.

## **D. Special Studies, Technical Reports and Additional Monitoring Requirements (Not Applicable)**

## **E. Best Management Practices of Pollution Prevention**

All Dischargers are encouraged to implement Best Management Practices and Pollution Prevention Plans to minimize pollutant concentrations in the discharge.

## **F. Construction, Operation and Maintenance Specifications**

All owners or operators authorized discharge under the General Permit shall maintain and update, as necessary, a Groundwater Treatment System Operation and Maintenance (O&M) Manual to assure efficient and effective treatment of contaminated groundwater (pollutants concentrations above water quality criteria and goals). The O&M Manual shall address, but not limited to, the following.

The O&M manual shall specify both normal operating and critical maximum or minimum values for treatment process variables including influent concentrations, flow rates, water levels, temperatures, time intervals, and chemical feed rates.

The O&M manual shall specify an inspection and maintenance schedule for active and reserve system and shall provide a log sheet format to document inspection observations and record completion of maintenance tasks.

The O&M manual shall include a Contingency and Notification Plan. The plan shall include procedures for reporting personnel to assure compliance with this General Permit, as well as authorization letters from the Executive Officer.

The O&M manual shall specify safeguards to prevent noncompliance with limitations and requirements of the General Permit resulting from equipment failure, power loss, vandalism, or ten-year return frequency rainfall.

## **G. Engineering Design Report**

For all new dischargers and existing dischargers where significant changes have made since prior submittals to the Regional Water Board, the NOI shall be accompanied by treatment flow schematic diagram and a certification, which demonstrates that the treatment process and the physical design of the treatment components will ensure compliance with the prohibitions, effluent limitations, and other conditions of the General Permit.

## **H. Special Provisions for Municipal Facilities (POTWs Only)**

Not Applicable

## **I. Other Special Provisions**

### **1. Expiration and Continuation of this Order**

This Order expires on March 7, 2017; however, for those dischargers authorized to discharge under this Order, it shall continue in full force and effect until a new order is adopted. Notwithstanding Provision L (Expiration Date and Continuation of this Order) of Order No. R4-2007-0022, discharges regulated under Order No. R4-2007-0022 on or before sixtieth day of notification of adoption of this Order, that has submitted a completed NOI may continue under Order No. R4-2007-0022 until enrolled under this General Permit.

## **2. Reauthorization**

Upon reissuance of a new general permit order, dischargers authorized under this Order shall file a Notice of Intent or a new Report of Waste Discharge within 60 days of notification by the Executive Officer.

## **3. Rescission**

Except for enforcement purposes, Order No. R4-2007-0022, adopted by this Regional Board on April 5, 2007, is rescinded effective March 7, 2013.

## **J. Compliance Schedules**

Not Applicable

## **VIII. COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

### **A. General.**

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Appendix A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

### **B. Multiple Sample Data.**

When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

### **C. Average Monthly Effluent Limitation (AMEL).**

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of

compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**D. Average Weekly Effluent Limitation (AWEL).**

If the average < (or when applicable, the median determined by subsection B above for multiple sample data)> of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**E. Maximum Daily Effluent Limitation (MDEL).**

If a daily discharge exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

**F. Instantaneous Minimum Effluent Limitation.**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

**G. Instantaneous Maximum Effluent Limitation.**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

**H. Limitations Based on Sediment TMDLs.**

Where sediment based effluent limitations is applicable discharger are allowed to demonstrate compliance with sediment TMDL limitations by complying with the TSS effluent limitation and CTR based toxic effluent limitation for the sediment based TMDL toxics of concern.

If the effluent analysis satisfies Condition A or B as listed below, the Discharger has demonstrated compliance with the sediment limitations. Therefore, no further sediment monitoring is required.

Condition A: Does not exceed TSS effluent limits and the CTR values of the sediment TMDL priority pollutants (Sediment-CTR Values). Table showing the CTR values of the priority pollutants targeted in the TMDLs covered in this Order is in the Appendix B of the Order;

Condition B: Exceeds TSS effluent limits, but does not exceed the Sediment-CTR Values.

When both TSS and the Sediment-CTR Values are exceeded, an accelerated monitoring program for TSS and the exceeded priority pollutant(s) shall be implemented in the following week when the exceedances are observed.

If two consecutive effluent sampling events show exceedance for both TSS and the Sediment-CTR value(s), the discharger is determined to be non-compliance with sediment based effluent limitation. Thereafter, sediment based effluent monitoring shall be implemented as prescribed in the Monitoring and Reporting Program for the rest of the permitting cycle.

However, if two successive sampling events show compliance with TSS and the sediment-CTR value(s), the discharge shall continue with regular effluent monitoring in accordance with the MRP.

## APPENDIX A

### SWRCB Minimum Levels in ppb (µg/L)

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the SWRCB and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs.

| Table 2a - VOLATILE SUBSTANCES* | GC  | GCMS |
|---------------------------------|-----|------|
| 1,1 Dichloroethane              | 0.5 | 1    |
| 1,1 Dichloroethene              | 0.5 | 2    |
| 1,1,1 Trichloroethane           | 0.5 | 2    |
| 1,1,2 Trichloroethane           | 0.5 | 2    |
| 1,1,2,2 Tetrachloroethane       | 0.5 | 1    |
| 1,2 Dichlorobenzene (volatile)  | 0.5 | 2    |
| 1,2 Dichloroethane              | 0.5 | 2    |
| 1,2 Dichloropropane             | 0.5 | 1    |
| 1,3 Dichlorobenzene (volatile)  | 0.5 | 2    |
| 1,3 Dichloropropene (volatile)  | 0.5 | 2    |
| 1,4 Dichlorobenzene (volatile)  | 0.5 | 2    |
| Acrolein                        | 2.0 | 5    |
| Acrylonitrile                   | 2.0 | 2    |
| Benzene                         | 0.5 | 2    |
| Bromoform                       | 0.5 | 2    |
| Bromomethane                    | 1.0 | 2    |
| Carbon Tetrachloride            | 0.5 | 2    |
| Chlorobenzene                   | 0.5 | 2    |
| Chlorodibromo-methane           | 0.5 | 2    |
| Chloroethane                    | 0.5 | 2    |
| Chloroform                      | 0.5 | 2    |
| Chloromethane                   | 0.5 | 2    |
| Dichlorobromo-methane           | 0.5 | 2    |
| Dichloromethane                 | 0.5 | 2    |
| Ethylbenzene                    | 0.5 | 2    |
| Tetrachloroethene               | 0.5 | 2    |
| Toluene                         | 0.5 | 2    |
| Trans-1,2 Dichloroethylene      | 0.5 | 1    |
| Trichloroethene                 | 0.5 | 2    |
| Vinyl Chloride                  | 0.5 | 2    |

\*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.



| Table 2b - SEMI-VOLATILE<br>SUBSTANCES* | GC | GCMS | LC   | COLOR |
|---|----|------|------|-------|
| 1,2 Benzanthracene                      | 10 | 5    |      |       |
| 1,2 Dichlorobenzene (semivolatile)      | 2  | 2    |      |       |
| 1,2 Diphenylhydrazine                   |    | 1    |      |       |
| 1,2,4 Trichlorobenzene                  | 1  | 5    |      |       |
| 1,3 Dichlorobenzene (semivolatile)      | 2  | 1    |      |       |
| 1,4 Dichlorobenzene (semivolatile)      | 2  | 1    |      |       |
| 2 Chlorophenol                          | 2  | 5    |      |       |
| 2,4 Dichlorophenol                      | 1  | 5    |      |       |
| 2,4 Dimethylphenol                      | 1  | 2    |      |       |
| 2,4 Dinitrophenol                       | 5  | 5    |      |       |
| 2,4 Dinitrotoluene                      | 10 | 5    |      |       |
| 2,4,6 Trichlorophenol                   | 10 | 10   |      |       |
| 2,6 Dinitrotoluene                      |    | 5    |      |       |
| 2- Nitrophenol                          |    | 10   |      |       |
| 2-Chloroethyl vinyl ether               | 1  | 1    |      |       |
| 2-Chloronaphthalene                     |    | 10   |      |       |
| 3,3' Dichlorobenzidine                  |    | 5    |      |       |
| 3,4 Benzofluoranthene                   |    | 10   | 10   |       |
| 4 Chloro-3-methylphenol                 | 5  | 1    |      |       |
| 4,6 Dinitro-2-methylphenol              | 10 | 5    |      |       |
| 4- Nitrophenol                          | 5  | 10   |      |       |
| 4-Bromophenyl phenyl ether              | 10 | 5    |      |       |
| 4-Chlorophenyl phenyl ether             |    | 5    |      |       |
| Acenaphthene                            | 1  | 1    | 0.5  |       |
| Acenaphthylene                          |    | 10   | 0.2  |       |
| Anthracene                              |    | 10   | 2    |       |
| Benzidine                               |    | 5    |      |       |
| Benzo(a) pyrene(3,4 Benzopyrene)        |    | 10   | 2    |       |
| Benzo(g,h,i)perylene                    |    | 5    | 0.1  |       |
| Benzo(k)fluoranthene                    |    | 10   | 2    |       |
| bis 2-(1-Chloroethoxyl) methane         |    | 5    |      |       |
| bis(2-chloroethyl) ether                | 10 | 1    |      |       |
| bis(2-Chloroisopropyl) ether            | 10 | 2    |      |       |
| bis(2-Ethylhexyl) phthalate             | 10 | 5    |      |       |
| Butyl benzyl phthalate                  | 10 | 10   |      |       |
| Chrysene                                |    | 10   | 5    |       |
| di-n-Butyl phthalate                    |    | 10   |      |       |
| di-n-Octyl phthalate                    |    | 10   |      |       |
| Dibenzo(a,h)-anthracene                 |    | 10   | 0.1  |       |
| Diethyl phthalate                       | 10 | 2    |      |       |
| Dimethyl phthalate                      | 10 | 2    |      |       |
| Fluoranthene                            | 10 | 1    | 0.05 |       |
| Fluorene                                |    | 10   | 0.1  |       |

| Table 2b - SEMI-VOLATILE SUBSTANCES* | GC | GCMS | LC   | COLOR |
|--------------------------------------|----|------|------|-------|
| Hexachloro-cyclopentadiene           | 5  | 5    |      |       |
| Hexachlorobenzene                    | 5  | 1    |      |       |
| Hexachlorobutadiene                  | 5  | 1    |      |       |
| Hexachloroethane                     | 5  | 1    |      |       |
| Indeno(1,2,3,cd)-pyrene              |    | 10   | 0.05 |       |
| Isophorone                           | 10 | 1    |      |       |
| N-Nitroso diphenyl amine             | 10 | 1    |      |       |
| N-Nitroso-dimethyl amine             | 10 | 5    |      |       |
| N-Nitroso -di n-propyl amine         | 10 | 5    |      |       |
| Naphthalene                          | 10 | 1    | 0.2  |       |
| Nitrobenzene                         | 10 | 1    |      |       |
| Pentachlorophenol                    | 1  | 5    |      |       |
| Phenanthrene                         |    | 5    | 0.05 |       |
| Phenol **                            | 1  | 1    |      | 50    |
| Pyrene                               |    | 10   | 0.05 |       |

\* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

\*\* Phenol by colorimetric technique has a factor of 1.

| Table 2c – INORGANICS* | FAA | GFAA | ICP | ICPMS | SPGFAA | HYDRIDE | CVAA | COLOR | DCP    |
|------------------------|-----|------|-----|-------|--------|---------|------|-------|--------|
| Antimony               | 10  | 5    | 50  | 0.5   | 5      | 0.5     |      |       | 1,000  |
| Arsenic                |     | 2    | 10  | 2     | 2      | 1       |      | 20    | 1,000  |
| Beryllium              | 20  | 0.5  | 2   | 0.5   | 1      |         |      |       | 1,000  |
| Cadmium                | 10  | 0.5  | 10  | 0.25  | 0.5    |         |      |       | 1,000  |
| Chromium (total)       | 50  | 2    | 10  | 0.5   | 1      |         |      |       | 1,000  |
| Chromium VI            | 5   |      |     |       |        |         |      | 10    |        |
| Copper                 | 25  | 5    | 10  | 0.5   | 2      |         |      |       | 1,000  |
| Cyanide                |     |      |     |       |        |         |      | 5     |        |
| Lead                   | 20  | 5    | 5   | 0.5   | 2      |         |      |       | 10,000 |
| Mercury                |     |      |     | 0.5   |        |         | 0.2  |       |        |
| Nickel                 | 50  | 5    | 20  | 1     | 5      |         |      |       | 1,000  |
| Selenium               |     | 5    | 10  | 2     | 5      | 1       |      |       | 1,000  |
| Silver                 | 10  | 1    | 10  | 0.25  | 2      |         |      |       | 1,000  |
| Thallium               | 10  | 2    | 10  | 1     | 5      |         |      |       | 1,000  |
| Zinc                   | 20  |      | 20  | 1     | 10     |         |      |       | 1,000  |

\* The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

| Table 2d – PESTICIDES – PCBs*     | GC    |
|-----------------------------------|-------|
| 4,4'-DDD                          | 0.05  |
| 4,4'-DDE                          | 0.05  |
| 4,4'-DDT                          | 0.01  |
| a-Endosulfan                      | 0.02  |
| a-Hexachloro-cyclohexane          | 0.01  |
| Aldrin                            | 0.005 |
| b-Endosulfan                      | 0.01  |
| b-Hexachloro-cyclohexane          | 0.005 |
| Chlordane                         | 0.1   |
| d-Hexachloro-cyclohexane          | 0.005 |
| Dieldrin                          | 0.01  |
| Endosulfan Sulfate                | 0.05  |
| Endrin                            | 0.01  |
| Endrin Aldehyde                   | 0.01  |
| Heptachlor                        | 0.01  |
| Heptachlor Epoxide                | 0.01  |
| Lindane(g-Hexachloro-cyclohexane) | 0.02  |
| PCB 1016                          | 0.5   |
| PCB 1221                          | 0.5   |
| PCB 1232                          | 0.5   |
| PCB 1242                          | 0.5   |
| PCB 1248                          | 0.5   |
| PCB 1254                          | 0.5   |
| PCB 1260                          | 0.5   |
| Toxaphene                         | 0.5   |

\* The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

### **Techniques:**

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR – Colorimetric

## **APPENDIX- B**

**Effluent Limitations based on CTR and SIP procedures for the those Metals and Organics Listed in TMDLs; Ballona Creek Estuary Toxics TMDLs, Dominguez Channel Estuary, Los Angeles and Long Beach Harbors TMDLs and Marina Del Rey Harbor Toxics TMDLs that Requires sediment analysis<sup>8</sup>**

| Constituents | Units | Effluent Limitations |              |
|--------------|-------|----------------------|--------------|
|              |       | Daily Max.           | Monthly Avg. |
| Cadmium      | µg/L  | 5                    | ---          |
| Copper       | µg/L  | 5.8                  | 2.9          |
| Lead         | µg/L  | 14                   | 7            |
| Silver       | µg/L  | 2.2                  | 1.1          |
| Zinc         | µg/L  | 95                   | 47           |
| Chlordane    | µg/L  | 0.00126              | 0.00059      |
| 4,4'-DDT     | µg/L  | 0.00126              | 0.00059      |
| 4,4'-DDT     | µg/L  | 0.00126              | 0.00059      |
| 4,4'-DDD     | µg/L  | 0.0017               | 0.00084      |
| Total PCBs   | µg/L  | 0.00034              | 0.00017      |
| Total PAHs   | µg/L  | NA                   | NA           |

---

<sup>8</sup> Compliance for TSS and the toxics pollutants in the effluent must be demonstrated to satisfy the compliance requirements for sediment Waste Load allocations for toxic pollutants listed in the respective TMDLs.


Los Angeles Regional Water Quality Control Board

**ORDER NO. R4-2013-0095  
GENERAL NPDES PERMIT NO. CAG994004  
WASTE DISCHARGE REQUIREMENTS  
FOR  
DISCHARGES OF GROUNDWATER FROM CONSTRUCTION AND PROJECT DEWATERING  
TO SURFACE WATERS  
IN  
COASTAL WATERSHEDS OF LOS ANGELES AND VENTURA COUNTIES**

|  |                     |
|--|---------------------|
| This Order was adopted by the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) on:                             | <b>June 6, 2013</b> |
| This Order shall become effective on:  | <b>July 6, 2013</b> |
| This Order shall expire on:  | <b>July 6, 2018</b> |
| The U.S. Environmental Protection Agency and the Regional Water Board have classified discharges covered under this General Permit as a minor discharge. |                     |

IT IS HEREBY ORDERED, that Order No. R4-2008-0032 is superseded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Samuel Unger, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 6, 2013.

  
\_\_\_\_\_  
Samuel Unger, P.E.  
Executive Officer

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## **I. FACILITY/DISCHARGE INFORMATION**

This Order (hereafter also referred to as “this General Permit”) is intended to authorize discharges of treated or untreated groundwater generated from permanent, temporary dewatering operations or other applicable wastewater discharges not specifically covered in other general or individual NPDES permits. Discharges from facilities to waters of the United States that do not cause, have the reasonable potential to cause, or contribute to an in-stream excursion above any applicable state or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water are authorized discharges in accordance with the conditions set forth in this Order.

## **II. NOTIFICATION REQUIREMENTS**

### **A. Eligibility Criteria**

1. This Order covers discharges to surface waters of groundwater from dewatering operations and other types of wastewaters as deemed appropriate.
2. To be covered under this Order, a discharger must:
  - a. Demonstrate that the discharges shall not cause or contribute to a violation of any applicable water quality objective/criteria for the receiving waters, or any other Discharge Prohibition in Part IV of this Order;
  - b. Demonstrate that the discharge shall not exceed the effluent limitations or discharge specifications in Part V and Attachment B of this Order, and there shall be no reasonable potential to cause or contribute to an excursion above the applicable water quality objectives/criteria for the receiving water.
  - c. Perform reasonable potential analysis using a representative sample of groundwater or wastewater to be discharged. The sample shall be analyzed and the data compared to the water quality screening criteria for the constituents listed on Attachment E.
    - i. If the analytical test results exceed the water quality screening criteria listed on Attachment E, then a reasonable potential for discharge of toxics shall be considered to exist.
    - ii. If the analytical test results of the discharge show that any toxic exceeds the water quality screening criteria listed on Attachment E, then the Discharger will be enrolled under this General Permit and treatment of the wastewater will be required for discharge.
    - iii. If the analytical test results of the discharge show that toxics are below the screening levels in Attachment E, then the Discharger will be enrolled under this General Permit and treatment of the wastewater for toxics will not be required for discharge.
  - d. The discharge shall not cause acute nor chronic toxicity in receiving waters;
  - e. If necessary, the discharge shall pass through a treatment system designed and operated to reduce the concentration of contaminants to meet the effluent limitations of this Order; and
  - f. The Discharger shall be able to comply with the terms or provisions of this General Permit.
3. New discharges and existing discharges regulated under existing general or individual permits, which meet the eligibility criteria, may be regulated under this Order.



4. For the purpose of renewal of existing individual NPDES permits with this General Permit, provided that all the conditions of this General Permit are met, renewal is effective upon issuance of a notification by the Executive Officer and issuance of a new monitoring program.
5. When an individual NPDES permit with more specific requirements is issued to a discharger, the applicability of this Order to that discharger is automatically terminated on the effective date of the individual permit.

**B. Ineligibility**

The discharge of wastewater containing toxic pollutants, where there are no effluent limitations for such toxic pollutants in this General Permit, are not eligible for enrollment under this General Permit.

**C. Authorization**

To be authorized to discharge under this Order, the Discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part D of this Order. Upon receipt of the application, the Executive Officer shall determine the applicability of this Order to such a discharge. If the discharge is eligible, the Executive Officer shall notify the Discharger that the discharge is authorized under the terms and conditions of this Order and prescribe an appropriate monitoring and reporting program. For new discharges, the discharge shall not commence until receipt of the Executive Officer's written determination of eligibility for coverage under this General Permit or until an individual NPDES permit is issued by the Regional Water Board.

**D. Notice of Intent**

1. Deadline for Submission
  - a. Renewal of permits of existing dischargers covered under individual permits that meet the eligibility criteria and have submitted a NOI will consist of a letter of determination from the Executive Officer of coverage under this Order.
  - b. Existing dischargers covered under Order No. R4-2008-0032 will be sent a NOI form that must be completed and returned to the Regional Water Board within 60 days of receipt; otherwise permit coverage may be revoked. Existing dischargers enrolling under this Order are required to collect a representative groundwater/wastewater sample and analyze it for all the constituents listed on Attachment E. Dischargers shall conduct this analysis and submit the result with a NOI, otherwise the existing authorization may be terminated. Existing discharges that has been enrolled under the existing permit within the last one year can re-submit the analytical data used for their initial enrollment with their NOI.
  - c. New dischargers shall file a complete application at least 45 days before commencement of the discharge.
2. Forms for Report of Waste Discharge
  - a. Dischargers shall use the NOI Form.
  - b. The Discharger, upon request, shall submit any additional information that the Executive Officer deems necessary to determine whether the discharge meets the criteria for coverage under this Order, to prescribe an appropriate monitoring and reporting program, or both.
  - c. The Discharger must obtain and analyze (using appropriate methods) a representative sample of the groundwater to be treated and discharged under this

Order. The analytical method used shall be capable of achieving a detection limit at or below the minimum level, otherwise, a written explanation shall be provided. The analytical result shall be submitted with the NPDES application. The data shall be tabulated and shall include the results for every constituent listed on Attachment E.

- d. Pursuant to section 2, Article X of the California Constitution, and section 275 of the California Water Code on preventing waste and unreasonable use of waters of the state, this Regional Water Board encourages, wherever practical, water conservation and/or reuse of wastewater. To obtain coverage under this Order, the Discharger shall first investigate the feasibility of conservation, reuse, injection of the groundwater, and/or alternative disposal methods of the wastewater.
- e. The following should be included with the NOI Form:
  - i. The feasibility study on conservation, reuse, and/or alternative disposal methods of the wastewater;
  - ii. Description of the treatment system;
  - iii. The type of chemicals that will be used (if any) during the operation and maintenance of the treatment system;
  - iv. Flow diagram of the influent to the discharge point; and
  - v. Preventive maintenance procedures and schedule for the treatment system.
- vi. **Creekside construction dewatering operations.** Creekside construction dewatering operations for the purposes of this General Permit are defined as the dewatering of groundwater (1) where the dewatering is necessary during construction operations, and (2) where the groundwater has a direct hydrologic connection with, and similar mineral chemistry for TDS, chloride and sulfate to, the surface waterbody to which it will be discharged. For creekside construction dewatering operations, the following additional information shall be submitted with a Report of Waste Discharge (ROWD).
  - (1). Best Management Practices (BMPs) for preventing degradation of water quality or impairment of receiving water beneficial uses,
  - (2). Demonstration of direct hydrologic connection and similar water chemistry between the groundwater and the surface water body must be substantiated with hydrogeological and analytical data, and certified by registered hydrogeologist. Water isotope tracing and other geophysical techniques may be used to demonstrate hydrologic connectivity. In addition, when feasible evidence of the physical connection between the groundwater and the surface water body could be demonstrated by stream depletion or drawdown by test well dewatering operation,
  - (3). The treatment system to be used for removing toxic compounds from the wastewater (if applicable),
  - (4). A demonstration that the Discharger has considered sewerage, infiltration, re-use, or other discharge options and that it is infeasible to discharge to the sanitary sewer system, to re-use the dewatered groundwater/wastewater, or to otherwise lawfully discharge the dewatered groundwater/wastewater.
- f. Section 2200 (Annual Fee Schedules) of Title 23 of the California Code of Regulations (CCR) requires that all discharges subject to waste discharge requirements shall pay an annual fee.

#### **E. Notice of Termination**

Dischargers shall submit a Notice of Termination or Transfer (NOTT) when coverage under this General Permit is no longer needed. An NOTT contains the Waste Discharge Identification Number (WDID), the name and address of the owner of the facility, and is signed and dated by the owner certifying that the Discharger associated with Permit No. CAG994004 have been eliminated or that there has been a change in ownership. Upon submission, the Discharger is no longer authorized to discharge wastewater associated with this General Permit.

#### **F. Change of Ownership**

Coverage under this Order may be transferred in case of change of ownership of land or discharge facility provided the existing discharger notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new dischargers containing a specific date of transfer of coverage, responsibility for compliance with this Order, and liability between them.

### **III. FINDINGS**

The Regional Water Board finds:

**A. Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on federal and state laws and regulations, information submitted as part of previous NOIs and monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G are also incorporated into this Order.

#### **B. Background**

1. On June 5, 2008, the Regional Water Board adopted Order No. R4-2008-0032, General NPDES Permit No. CAG994004, Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters. Order No. R4-2008-0032 expired on June 5, 2013, but was administratively extended. Approximately 208 dischargers are enrolled under Order No. R4-2008-0032. This Order renews the requirements of Order No. R4-2008-0032.
2. On September 22, 1989, the United States Environmental Protection Agency (USEPA) granted the State of California, through the State Water Resources Control Board (State Water Board) and the regional water boards, the authority to issue general National Pollutant Discharge Elimination System (NPDES) permits pursuant to parts 122 and 123 of Title 40 of the Code of Federal Regulations (40 CFR).
3. 40 CFR section 122.28 provides for issuance of general NPDES permits to regulate a category of point sources if the sources:
  - a. Involve the same or substantially similar types of operations;
  - b. Discharge the same type of waste;
  - c. Require the same type of effluent limitations or operating conditions;
  - d. Require similar monitoring; and
  - e. Are more appropriately regulated under a general permit rather than individual permits.

4. General waste discharge requirements and NPDES permits enable Regional Water Board staff to expedite the processing of requirements, simplify the application process for dischargers, better utilize limited staff resources, and avoid the expense and time involved in repetitive public noticing, hearings, and permit adoptions.

**C. Facility and Discharge Description**

1. Discharges covered under this General Permit include groundwater generated from permanent or temporary dewatering operations or other appropriate wastewater discharge not specifically covered in other general or individual NPDES permits. In addition, this General Permit covers discharges from cleanup of contaminated sites where other project specific general permits may not be appropriate, such as groundwater impacted by metals and/or other toxic compounds. This General Permit also covers discharges from dewatering operations in the vicinity of creeks where surface waters and groundwaters are hydrologically connected and have similar water chemistry. Creekside discharges that qualify under this General Permit will not be required to comply with the waterbody specific limitations for total dissolved solids (TDS), sulfate or chloride. The purpose of this approach to regulating creekside discharges is to avoid requiring a discharger to treat a surface waterbody to lower than naturally occurring, background, mineral content. In such circumstance, cycling the extracted creekside water back into the waterbody would not cause any decrease in the quality of the waterbody or degradation.
2. Wastewater discharge from permanent or temporary dewatering activities include, but are not limited to, the following:
  - a. Treated or untreated wastewater from permanent or temporary construction dewatering operations
  - b. Groundwater pumped as an aid in the containment and/or cleanup of contaminant plume
  - c. Groundwater extracted during short-term and long-term pumping/aquifer tests
  - d. Groundwater generated from well drilling, construction or development and purging of wells
  - e. Equipment decontamination water
  - f. Subterranean seepage dewatering
  - g. Incidental collected stormwater from basements
3. Other wastewater discharges covered by this General Permit include process and non-process wastewater that meet the eligibility criteria and could not be covered under other specific general NPDES permits.
4. This Regional Water Board adopted: (1) Order No. R4-2012-0175, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach [NPDES No. CAS004001] on November 8, 2012; (2) Order No. R4-2010-0108, Waste Discharge Requirements for Storm Water (Wet Weather) and Non-Storm Water (Dry Weather) Discharges from the MS4s within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein [NPDES No. CAS004002] on July 8, 2010; and (3) Order No. 99-060, Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges Within the City of Long Beach [NPDES No. CAS004003] on June 30, 1999. These permits generally prohibit non-stormwater discharges to MS4s unless they are covered by a separate

general or individual NPDES permit or are within a category of conditionally exempt discharges, provided the discharge is not itself a source of pollutants and meets all required conditions. This prohibition, in general, does not apply to natural flows, such as rising groundwater where groundwater seepage is not otherwise covered by a NPDES permit and uncontaminated groundwater infiltration. Conditionally exempt non-storm water discharges shall not cause or contribute to an exceedance of applicable water quality objectives/standards and/or water quality based effluent limitations.

#### **IV. DISCHARGE PROHIBITIONS**

1. Discharges of any waste at a location different from that authorized by the Executive Officer of the Regional Water Board are prohibited.
2. Discharges of any waste other than those that meet eligibility requirements in Part II.A of this Order are prohibited, unless the Discharger is regulated for such discharges by another NPDES permit or discharges into a permitted facility.
3. Discharges of wastewater in excess of the flow rates authorized by the Executive Officer of the Regional Water Board are prohibited.
4. Discharges of any waste that exceed applicable effluent limitations are prohibited.
5. Discharges that contain any substances in concentrations toxic to human, animal, plant, or aquatic life are prohibited.
6. Discharges that cause or contribute to a violation of any applicable water quality objective/criteria for the receiving water are prohibited.
7. Pollution, contamination, or nuisance as defined by section 13050 of the CWC, which are created by the treatment or the discharge of pollutants authorized under this Order, are prohibited.
8. Discharges of any radiological, chemical, or biological warfare agent or high level radiological waste are prohibited.
9. Bypass or overflow of untreated or partially treated contaminated groundwater to waters of the State either at the treatment system or from any of the collection or transport systems or pump stations tributary to the treatment system is prohibited.

#### **V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

##### **A. Effluent Limitations**

1. Discharge of effluent from the outfall location(s) listed in the enrollment authorization fact sheet in excess of the following effluent limitations is prohibited. In the authorization letter, when a Discharger is enrolled under this General Permit, the Executive Officer shall list in the fact sheet each constituent from the appropriate effluent limitation table(s) below that is applicable to the Discharger's effluent.

- a. Limits (Tables 1 and 2 ) applicable to discharges to freshwater or saltwater bodies

**Table 1. Effluent Limitations Applicable to All Discharges**

| Parameters                              | Units | Effluent Limitations |                 |
|---|-------|----------------------|-----------------|
|   |       | Maximum Daily        | Average Monthly |
| Total Suspended Solids                  | mg/L  | 75                   | 50              |
| Turbidity                               | NTU   | 150                  | 50              |
| BODs 20°C                               | mg/L  | 30                   | 20              |
| Oil and Grease                          | mg/L  | 15                   | 10              |
| Settleable Solids                       | ml/L  | 0.3                  | 0.1             |
| Sulfides                                | mg/L  | 1.0                  |                 |
| Phenols                                 | mg/L  | 1.0                  |                 |
| Residual Chlorine                       | mg/L  | 0.1                  |                 |
| Methylene Blue Active Substances (MBAS) | mg/L  | 0.5                  |                 |

**Table 2. Organic Compounds Effluent Limitations**

| Constituent                | Units | Discharge Limitations |              |                  |                    |
|----------------------------|-------|-----------------------|--------------|------------------|--------------------|
|                            |       | Other Waters          |              | MUN <sup>1</sup> |                    |
|                            |       | Max. Daily            | Avg. Monthly | Max. Daily       | Avg. Monthly       |
| Volatile Organic Compounds |       |                       |              |                  |                    |
| 1,1,2,2-tetrachloroethane  | µg/L  | 1                     |              | 0.34             | 0.17 <sup>2</sup>  |
| 1,1,2-trichloroethane      | µg/L  | 5                     |              | 1.2              | 0.6                |
| 1,1,1-trichloroethane      | µg/L  | 200                   |              | 200              |                    |
| 1,1-dichloroethane         | µg/L  | 5                     |              | 5                |                    |
| 1,1-dichloroethylene       | µg/L  | 6                     | 3.2          | 0.11             | 0.057 <sup>2</sup> |
| 1,2-dichloroethane         | µg/L  | 0.50                  |              | 0.50             | 0.38 <sup>2</sup>  |
| 1,2-dichloropropane        | µg/L  | 5                     |              | 1.1              | 0.52 <sup>2</sup>  |
| 1,2-trans-dichloroethylene | µg/L  | 10                    |              | 10               |                    |
| 1,3-dichloropropylene      | µg/L  | 0.5                   |              | 0.5              |                    |
| Acrolein                   | µg/L  | 100                   |              | 100              |                    |
| Acrylonitrile              | µg/L  | 1.7                   | 0.66         | 0.12             | 0.059 <sup>2</sup> |
| Acetone                    | µg/L  | 700                   |              | 700              |                    |
| Benzene                    | µg/L  | 1.0                   |              | 1.0              |                    |
| Bromoform                  | µg/L  | 720                   | 360          | 8.6              | 4.3                |
| Carbon tetrachloride       | µg/L  | 0.5                   |              | 0.5              | 0.25               |

<sup>1</sup> MUN refers to discharges to those waterbodies designated MUN (Municipal and Domestic Supply) identified in the Basin Plan with an "E" or and "I" designation.

<sup>2</sup> If the reported detection level is greater than the effluent limit for this constituent, then a non-detect using ML detection is deemed to be in compliance.

| Constituent                            | Units | Discharge Limitations |              |                  |                      |
|--|-------|-----------------------|--------------|------------------|----------------------|
|  |       | Other Waters          |              | MUN <sup>1</sup> |                      |
|  |       | Max. Daily            | Avg. Monthly | Max. Daily       | Avg. Monthly         |
| Chlorobenzene                          | µg/L  | 30                    |              | 30               |                      |
| Chlorodibromomethane                   | µg/L  | 68                    | 34           | 0.81             | 0.40 <sup>2</sup>    |
| Dichlorobromomethane                   | µg/L  | 92                    | 46           | 1.1              | 0.56                 |
| Chloroethane                           | µg/L  | 100                   |              | 100              |                      |
| Chloroform                             | µg/L  | 100                   |              | 100              |                      |
| Methyl ethyl ketone                    | µg/L  | 700                   |              | 700              |                      |
| Ethylbenzene                           | µg/L  | 700                   |              | 700              |                      |
| Ethylene dibromide                     | µg/L  | 0.05                  |              | 0.05             |                      |
| Methyl tertiary butyl ether (MTBE)     | µg/L  | 5                     |              | 5                |                      |
| Methylbromide                          | µg/L  | 10                    |              | 10               |                      |
| Methylchloride                         | µg/L  | 3                     |              | 3                |                      |
| Methylene chloride                     | µg/L  | 3,200                 | 1,600        | 9.5              | 4.7                  |
| Tetrachloroethylene                    | µg/L  | 5.0                   |              | 1.6              | 0.8                  |
| Toluene                                | µg/L  | 150                   |              | 150              |                      |
| Trichloroethylene                      | µg/L  | 5.0                   |              | 5.0              | 2.7                  |
| Vinyl chloride                         | µg/L  | 0.5                   |              | 0.5              |                      |
| Xylenes                                | µg/L  | 1750                  |              | 1750             |                      |
| <b>Pesticides and PCBs</b>             |       |                       |              |                  |                      |
| 4,4'-DDD                               | µg/L  | 0.0017                | 0.00084      | 0.0017           | 0.00083 <sup>2</sup> |
| 4,4'-DDE                               | µg/L  | 0.0012                | 0.00059      | 0.0012           | 0.00059 <sup>2</sup> |
| Aldrin                                 | µg/L  | 0.00028               | 0.00014      | 0.00027          | 0.00013 <sup>2</sup> |
| alpha-BHC                              | µg/L  | 0.026                 | 0.013        | 0.0079           | 0.0039 <sup>2</sup>  |
| beta-BHC                               | µg/L  | 0.092                 | 0.046        | 0.028            | 0.014                |
| Endosulfan Sulfate                     | µg/L  | 480                   | 240          | 220              | 110                  |
| Endrin Aldehyde                        | µg/L  | 1.6                   | 0.81         | 1.5              | 0.76                 |
| Gamma-BHC                              | µg/L  | 0.12                  | 0.063        | 0.039            | 0.019 <sup>2</sup>   |
| PCBs                                   | µg/L  | 0.00034               | 0.00017      | 0.00034          | 0.00017 <sup>2</sup> |
| <b>Semi-Volatile Organic Compounds</b> |       |                       |              |                  |                      |
| 1,2 Dichlorobenzene                    | µg/L  | 600                   |              | 600              |                      |
| 1,2-Diphenylhydrazine                  | µg/L  | 1.1                   | 0.54         | 0.081            | 0.040 <sup>2</sup>   |
| 1,3 Dichlorobenzene                    | µg/L  | 5,200                 | 2,600        | 800              | 400                  |
| 1,4 Dichlorobenzene                    | µg/L  | 5                     |              | 5                |                      |
| 2,4,6-Trichlorophenol                  | µg/L  | 13                    | 6.5          | 4.3              | 2.1 <sup>2</sup>     |
| 2,4-Dichlorophenol                     | µg/L  | 1600                  | 790          | 190              | 93                   |
| 2,4-Dimethylphenol                     | µg/L  | 4,600                 | 2,300        | 1100             | 540                  |
| 2,4-Dinitrophenol                      | µg/L  | 28,000                | 14,000       | 140              | 70                   |
| 2,4-Dinitrotoluene                     | µg/L  | 18                    | 9.1          | 0.23             | 0.11 <sup>2</sup>    |
| 2-Chloronaphthalene                    | µg/L  | 8,600                 | 4,300        | 3,400            | 1,700                |
| 2-Chlorophenol                         | µg/L  | 800                   | 400          | 241              | 120                  |
| 2-Methyl-4,6-Dinitrophenol             | µg/L  | 1540                  | 765          | 26.9             | 13.4                 |

| Constituent                    | Units | Discharge Limitations |              |                  |                          |
|--------------------------------|-------|-----------------------|--------------|------------------|--------------------------|
|                                |       | Other Waters          |              | MUN <sup>1</sup> |                          |
|                                |       | Max. Daily            | Avg. Monthly | Max. Daily       | Avg. Monthly             |
| 3,3-Dichlorobenzidine          | µg/L  | 0.16                  | 0.077        | 0.088            | 0.04 <sup>2</sup>        |
| Acenaphthene                   | µg/L  | 5,400                 | 2,700        | 2,400            | 1,200                    |
| Anthracene                     | µg/L  | 220,000               | 110,000      | 19,000           | 9,600                    |
| Benzidine                      | µg/L  | 0.0011                | 0.00054      | 0.00025          | 0.00012 <sup>2</sup>     |
| Benzo(a)Anthracene             | µg/L  | 0.098                 | 0.049        | 0.0089           | 0.0044 <sup>2</sup>      |
| Benzo(a)Pyrene                 | µg/L  | 0.098                 | 0.049        | 0.0089           | 0.0044 <sup>2</sup>      |
| Benzo(b)Fluoranthene           | µg/L  | 0.098                 | 0.049        | 0.0089           | 0.0044 <sup>2</sup>      |
| Benzo(k)Fluoranthene           | µg/L  | 0.098                 | 0.049        | 0.0089           | 0.0044 <sup>2</sup>      |
| Bis(2-Chloroethyl)Ether        | µg/L  | 2.8                   | 1.4          | 0.063            | 0.031 <sup>2</sup>       |
| Bis(2-Chloroisopropyl)Ether    | µg/L  | 340,000               | 170,000      | 2,800            | 1,400                    |
| Bis(2-Ethylhexyl)Phthalate     | µg/L  | 11                    | 5.9          | 3.7              | 1.8 <sup>2</sup>         |
| Butylbenzyl Phthalate          | µg/L  | 10,000                | 5,200        | 6,000            | 3,000                    |
| Chrysene                       | µg/L  | 0.098                 | 0.049        | 0.0089           | 0.0044 <sup>2</sup>      |
| Dibenzo(a,h)Anthracene         | µg/L  | 0.098                 | 0.049        | 0.0089           | 0.0044 <sup>2</sup>      |
| Diethyl Phthalate              | µg/L  | 240,000               | 120,000      | 46,000           | 23,000                   |
| Dimethyl Phthalate             | µg/L  | 5,800,000             | 2,900,000    | 629,000          | 313,000                  |
| Di-n-Butyl Phthalate           | µg/L  | 24,000                | 12,000       | 5,400            | 2,700                    |
| Fluoranthene                   | µg/L  | 740                   | 370          | 600              | 300                      |
| Fluorene                       | µg/L  | 28,000                | 14,000       | 2,600            | 1,300                    |
| Hexachlorobenzene              | µg/L  | 0.0016                | 0.00077      | 0.0015           | 0.00075 <sup>2</sup>     |
| Hexachlorobutadiene            | µg/L  | 100                   | 50           | 0.89             | 0.44 <sup>2</sup>        |
| Hexachlorocyclopentadiene      | µg/L  | 34,000                | 17,000       | 480              | 240                      |
| Hexachloroethane               | µg/L  | 18                    | 8.9          | 3.8              | 1.9                      |
| Indeno(1,2,3-cd) Pyrene        | µg/L  | 0.098                 | 0.049        | 0.0088           | 0.0044 <sup>2</sup>      |
| Isophorone                     | µg/L  | 1200                  | 600          | 17               | 8.4                      |
| Naphthalene                    | µg/L  | 21                    |              | 21               |                          |
| Nitrobenzene                   | µg/L  | 3,800                 | 1,900        | 34               | 17                       |
| N-Nitrosodimethyl amine (NDMA) | µg/L  | 16                    | 8.1          | 0.0014           | 0.00069 <sup>2</sup>     |
| N-Nitrosodi-n-Propylamine      | µg/L  | 2.8                   | 1.4          | 0.011            | 0.005 <sup>2</sup>       |
| N-Nitrosodiphenylamine         | µg/L  | 32                    | 16           | 10               | 5.0                      |
| Phenol                         | µg/L  | 1,000                 | no limit     | 1,000            | no limit                 |
| Pyrene                         | µg/L  | 22,000                | 11,000       | 1930             | 960                      |
| <b>Miscellaneous</b>           |       |                       |              |                  |                          |
| Asbestos                       | fib/L | no limit              | no limit     | 14,000,000       | 7,000,000                |
| Di-isopropyl ether (DIPE)      | µg/L  | 0.8                   | 0            | 0.8 <sup>2</sup> |                          |
| 1,4-Dioxane                    | µg/L  | 3                     |              | 3                |                          |
| Perchlorate                    | µg/L  | 6                     |              | 6                |                          |
| 2,3,7,8-TCDD (Dioxin)          | µg/L  | 0.000000028           | 0.000000014  | 0.000000026      | 0.000000013 <sup>2</sup> |
| Tertiary butyl alcohol (TBA)   | µg/L  | 12                    |              | 12               |                          |
| Total petroleum hydrocarbons   | µg/L  | 100                   |              | 100              |                          |



- b. Limits (Tables 3, 4, and 5) applicable to discharges to freshwater and saltwater waterbodies where no TMDLs has been established (All metal limitations in the Order, including Tables 3, 4, and 5 are in the form of total recoverable or TR, for short, whether they are specified or otherwise.

**Table 3. Hardness-Dependent Metals Effluent Limitations**

| Constituent | Unit | Hardness (mg/L) |              |            |              |               |              |
|-------------|------|-----------------|--------------|------------|--------------|---------------|--------------|
|             |      | up to 200       |              | 200 – 300  |              | 300 and above |              |
|             |      | Max. Daily      | Avg. Monthly | Max. Daily | Avg. Monthly | Max. Daily    | Avg. Monthly |
| Cadmium     | µg/L | 5               | 2.8          | 5          | 4.1          | 5             | 5            |
| Copper      | µg/L | 20.8            | 10.4         | 33.3       | 16.6         | 44.4          | 22.1         |
| Lead        | µg/L | 8.7             | 4.4          | 16.7       | 8.3          | 25.6          | 12.8         |
| Nickel      | µg/L | 100             | 60           | 100        | 90           | 100           | 100          |
| Silver      | µg/L | 8.1             | 4.0          | 20         | 10           | 41            | 20           |
| Zinc        | µg/L | 170             | 86           | 260        | 130          | 350           | 170          |

**Table 4. Other Compounds Effluent Limitations**

| Constituent        | Units | Discharge Limitations |                   |            |                      |
|--------------------|-------|-----------------------|-------------------|------------|----------------------|
|                    |       | Other Waters          |                   | MUN        |                      |
|                    |       | Max. Daily            | Avg. Monthly      | Max. Daily | Avg. Monthly         |
| Metals             |       |                       |                   |            |                      |
| Antimony           | µg/L  | 6                     |                   | 6          |                      |
| Arsenic            | µg/L  | 10                    |                   | 10         |                      |
| Beryllium          | µg/L  | 4                     |                   | 4          |                      |
| Chromium III       | µg/L  | 50                    |                   | 50         |                      |
| Chromium VI        | µg/L  | 16                    | 8                 | 16         | 8                    |
| Cyanide            | µg/L  | 8.5                   | 4.2               | 8.5        | 4.2                  |
| Mercury            | µg/L  | 0.1                   | 0.05 <sup>2</sup> | 0.1        | 0.05 <sup>2</sup>    |
| Selenium           | µg/L  | 8                     | 4                 | 8          | 4                    |
| Thallium           | µg/L  | 13                    | 6                 | 3.4        | 1.7                  |
| Organic Compounds  |       |                       |                   |            |                      |
| Pentachlorophenol  | µg/L  | 1.5                   | 0.73              | 0.56       | 0.28 <sup>2</sup>    |
| Chlordane          | µg/L  | 0.0012                | 0.00059           | 0.0012     | 0.00057 <sup>2</sup> |
| 4,4'-DDT           | µg/L  | 0.0012                | 0.00059           | 0.0012     | 0.00059 <sup>2</sup> |
| Dieldrin           | µg/L  | 0.00028               | 0.00014           | 0.00028    | 0.00014 <sup>2</sup> |
| alpha-Endosulfan   | µg/L  | 0.092                 | 0.046             | 0.092      | 0.046 <sup>2</sup>   |
| beta-Endosulfan    | µg/L  | 0.092                 | 0.046             | 0.092      | 0.046 <sup>2</sup>   |
| Endrin             | µg/L  | 0.059                 | 0.029             | 0.059      | 0.029 <sup>2</sup>   |
| Heptachlor         | µg/L  | 0.00042               | 0.00021           | 0.00042    | 0.00021 <sup>2</sup> |
| Heptachlor Epoxide | µg/L  | 0.00022               | 0.00011           | 0.00020    | 0.00010 <sup>2</sup> |
| Toxaphene          | µg/L  | 0.0015                | 0.00075           | 0.0015     | 0.00073 <sup>2</sup> |

**Table 5. Effluent Limitations applicable to discharges to saltwater waterbodies**

| Constituents       | Units | Discharge Limitations |                      |
|--------------------|-------|-----------------------|----------------------|
|                    |       | Max. Daily            | Avg. Monthly         |
| Metals             |       |                       |                      |
| Antimony           | µg/L  | 6                     |                      |
| Arsenic            | µg/L  | 10                    | 5                    |
| Beryllium          | µg/L  | 4                     |                      |
| Cadmium            | µg/L  | 5                     |                      |
| Chromium III       | µg/L  | 50                    |                      |
| Chromium VI        | µg/L  | 82                    | 41                   |
| Copper             | µg/L  | 5.8                   | 2.9                  |
| Cyanide            | µg/L  | 1.0                   | 0.50 <sup>2</sup>    |
| Lead               | µg/L  | 14                    | 7                    |
| Mercury            | µg/L  | 0.1                   | 0.05 <sup>2</sup>    |
| Nickel             | µg/L  | 14                    | 6.7                  |
| Selenium           | µg/L  | 120                   | 58                   |
| Silver             | µg/L  | 2.2                   | 1.1                  |
| Thallium           | µg/L  | 13                    | 6                    |
| Zinc               | µg/L  | 95                    | 47                   |
| Organic Compounds  |       |                       |                      |
| Pentachlorophenol  | µg/L  | 13                    | 6.4                  |
| Chlordane          | µg/L  | 0.0012                | 0.00059 <sup>2</sup> |
| 4,4'-DDT           | µg/L  | 0.0012                | 0.00059 <sup>2</sup> |
| Dieldrin           | µg/L  | 0.00028               | 0.00014 <sup>2</sup> |
| Alpha-Endosulfan   | µg/L  | 0.014                 | 0.0071 <sup>2</sup>  |
| Beta-Endosulfan    | µg/L  | 0.014                 | 0.0071 <sup>2</sup>  |
| Endrin             | µg/L  | 0.0038                | 0.0019 <sup>2</sup>  |
| Heptachlor         | µg/L  | 0.00042               | 0.00021 <sup>2</sup> |
| Heptachlor Epoxide | µg/L  | 0.00022               | 0.00011 <sup>2</sup> |
| Toxaphene          | µg/L  | 0.00033               | 0.00016 <sup>2</sup> |

- c. Limits (Table 6 through 26) based on Wasteload Allocations specified in corresponding TMDLs

**Table 6. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL Wasteload Allocations (WLAs), Dry Weather<sup>3</sup>**

| Reach                                       | Units | Copper, TR |              | Lead, TR   |              | Zinc, TR   |              | Selenium, TR |              |
|---|-------|------------|--------------|------------|--------------|------------|--------------|--------------|--------------|
|   |       | Max. Daily | Avg. Monthly | Max. Daily | Avg. Monthly | Max. Daily | Avg. Monthly | Max. Daily   | Avg. Monthly |
| Reach 5 & 6 & Bell Creek                    | µg/L  | 49         | 25           | 31         | 16           |            |              | 8.2          | 4.1          |
| Reach 4                                     | µg/L  | 43         | 21           | 16         | 8.2          |            |              |              |              |
| Reach 3 above LA-Glendale WRP and Verdugo   | µg/L  | 38         | 19           | 20         | 9.8          | ---        | ---          | ---          | ---          |
| Reach 3 below LA-Glendale WRP               | µg/L  | 43         | 21           | 20         | 9.8          | ---        | ---          | ---          | ---          |
| Burbank Western Channel (above Burbank WRP) | µg/L  | 43         | 21           | 23         | 11           | ---        | ---          | ---          | ---          |
| Burbank Western Channel (below Burbank WRP) | µg/L  | 31         | 16           | 15         | 7.4          | ---        | ---          | ---          | ---          |
| Reach 2 & Arroyo Seco                       | µg/L  | 36         | 18           | 18         | 9            | ---        | ---          | ---          | ---          |
| Reach 1                                     | µg/L  | 38         | 19           | 20         | 9.8          | ---        | ---          | ---          | ---          |
| Compton Creek                               | µg/L  | 31         | 16           | 15         | 7.3          | ---        | ---          | ---          | ---          |
| Rio Hondo Rch. 1                            | µg/L  | 21         | 11           | 8.2        | 4.1          | 210        | 110          | ---          | ---          |

**Table 7. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL WLAs, Wet Weather<sup>4</sup>**

| Constituents | Units | Effluent Limitations |                 |
|--------------|-------|----------------------|-----------------|
|              |       | Maximum Daily        | Average Monthly |
| Cadmium, TR  | µg/L  | 3.1                  | 1.5             |
| Copper, TR   | µg/L  | 17                   | 8.5             |
| Lead, TR     | µg/L  | 62                   | 31              |
| Zinc, TR     | µg/L  | 160                  | 79              |

<sup>3</sup> For purposes of this General Permit, discharges occurring from April 15<sup>th</sup> through November 14<sup>th</sup> are considered dry weather discharges.

<sup>4</sup> For purposes of this General Permit, discharges occurring from November 15<sup>th</sup> through April 14<sup>th</sup> are considered wet weather discharges.

**Table 8. WQBELs based on Basin Plan section 7-39 - Los Angeles River Watershed Bacteria TMDL WLAs**

| Constituents          | Units      | Effluent Limitations |               |
|-----------------------|------------|----------------------|---------------|
|                       |            | Geometric Mean       | Single Sample |
| <i>E.coli</i> density | MPN/100 mL | 126                  | 235           |

**Table 9. WQBELs based on Basin Plan section 7-12 - Ballona Creek Metals TMDL WLAs**

| Constituents | Units | Effluent Limitations |              |             |              |
|--------------|-------|----------------------|--------------|-------------|--------------|
|              |       | Dry Weather          |              | Wet Weather |              |
|              |       | Max. Daily           | Avg. Monthly | Max. Daily  | Avg. Monthly |
| Copper, TR   | µg/L  | 39                   | 20           | 18          | 9            |
| Lead, TR     | µg/L  | 21                   | 11           | 59          | 29           |
| Selenium, TR | µg/L  | 8.2                  | 4.1          | 5           | 2.5          |
| Zinc, TR     | µg/L  | 304                  | 151          | 119         | 59           |

**Table 10. WQBELs based on Basin Plan section 7-14 - Ballona Creek Estuary Toxic Pollutants TMDL WLAs in Sediment**

| Constituents | Units     | Effluent Limitations* |
|--------------|-----------|-----------------------|
| Cadmium      | mg/kg dry | 1.2                   |
| Copper       | mg/kg dry | 34                    |
| Lead         | mg/kg dry | 46.7                  |
| Silver       | mg/kg dry | 1.0                   |
| Zinc         | mg/kg dry | 150                   |
| Chlordane    | µg/kg dry | 0.5                   |
| DDTs         | µg/kg dry | 1.58                  |
| Total PCBs   | µg/kg dry | 22.7                  |
| Total PAHs   | µg/kg dry | 4,022                 |

\*: See Section VIII. H. for compliance determination.

**Table 11. WQBELs based on USEPA's Los Cerritos Channel Metals TMDL**

| Constituents | Units | Effluent Limitations |              |             |              |
|--------------|-------|----------------------|--------------|-------------|--------------|
|              |       | Dry Weather          |              | Wet Weather |              |
|              |       | Max. Daily           | Avg. Monthly | Max. Daily  | Avg. Monthly |
| Copper, TR   | µg/L  | 31                   | 16           | 9.8         | 4.8          |
| Lead, TR     | µg/L  |                      |              | 59          | 28           |
| Zinc, TR     | µg/L  |                      |              | 96          | 48           |

**Table 12. WQBELs based on Basin Plan section 7-30 – Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL WLAs, Portion of Sediment Toxicity**

| Constituents | Units     | Effluent Limitations* |
|--------------|-----------|-----------------------|
| Chlordane    | µg/kg dry | 0.50                  |
| Dieldrin     | µg/kg dry | 0.02                  |
| Lead         | µg/kg dry | 46,700.00             |
| Zinc         | µg/kg dry | 150,000.00            |
| PAHs         | µg/kg dry | 4,022.00              |
| PCBs         | µg/kg dry | 22.70                 |
| DDT          | µg/kg dry | 1.58                  |

\*: See Section VIII. H. for compliance determination.

**Table 13. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs (for the Freshwater Segment of Dominguez Channel) Wet Weather**

| Constituent | Units                    | Effluent Limitations |              |
|-------------|--------------------------|----------------------|--------------|
|             |                          | Max. Daily           | Avg. Monthly |
| Copper, TR  | µg/L (water, unfiltered) | 9.7                  | 4.8          |
| Lead, TR    | µg/L (water, unfiltered) | 43                   | 21           |
| Zinc, TR    | µg/L                     | 70                   | 35           |

**Table 14. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs (for the Dominguez Channel Estuary Segment and the Harbors)**

| Constituent | Units | Dominguez Channel Estuary |              | Greater Harbor Waters |              |
|-------------|-------|---------------------------|--------------|-----------------------|--------------|
|             |       | Max. Daily                | Avg. Monthly | Max. Daily            | Avg. Monthly |
| Copper, TR  | µg/L  | 6.1                       | 3            | 6.1                   | 3            |
| Lead, TR    | µg/L  | 14                        | 7            | 14                    | 7            |
| Zinc, TR    | µg/L  | 140                       | 70           | 140                   | 70           |
| PAHs        | µg/L  | 0.098                     | 0.049        |                       |              |
| Chlordane   | µg/L  | 0.0012                    | 0.00059      | --                    | --           |
| 4,4'-DDT    | µg/L  | 0.0012                    | 0.00059      | 0.0012                | 0.00059      |
| Dieldrin    | µg/L  | 0.00028                   | 0.00014      | ---                   | --           |
| Total PCBs  | µg/L  | 0.00034                   | 0.00017      | 0.00034               | 0.00017      |

**Table 15. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs in Sediment**

| Waterbody                                    | Effluent Limitations (mg/kg)* |      |       |
|--|-------------------------------|------|-------|
|  | Lead                          | Zinc | PAHs  |
| Long Beach Outer Harbor (inside breakwater)  | 46.7                          | 150  | 4.022 |
| Los Angeles Outer Harbor (inside breakwater) | 46.7                          | 150  | 4.022 |
| Los Angeles River Estuary                    | 46.7                          |      | 4.022 |
| Los Angeles Harbor–Inner Cabrillo Beach Area | 46.7                          |      | 4.022 |

\*: See Section VIII. H. for compliance determination.

**Table 16. WQBELs based on Basin Plan section 7-18 - Marina del Rey Harbor Toxic Pollutants TMDL WLAs in Sediment**

| Constituent | Units | Effluent Limitations* |
|-------------|-------|-----------------------|
| Copper      | mg/kg | 34                    |
| Lead        | mg/kg | 46.7                  |
| Zinc        | mg/kg | 150                   |
| Chlordane   | µg/kg | 0.5                   |
| Total PCBs  | µg/kg | 22.7                  |

\*: See Section VIII. H. for compliance determination.

**Table 17. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Dry Weather**

| Reaches                 | Units | Copper, TR |              | Selenium, TR |              |
|-------------------------|-------|------------|--------------|--------------|--------------|
|                         |       | Max. Daily | Avg. Monthly | Max. Daily   | Avg. Monthly |
| SJC R-1, 2 <sup>1</sup> | µg/L  |            |              | 8.2          | 4.1          |
| SGR R-1 <sup>2</sup>    | µg/L  | 30         | 15           |              |              |
| SGR R 2 <sup>3</sup>    | µg/L  |            |              |              |              |
| Coyote Creek            | µg/L  | 33         | 16           |              |              |
| Estuary                 | µg/L  | 5.1        | 2.5          |              |              |

1. San Jose Creek Reach 1 (Confluence to Temple Street) and San Jose Reach 2 (Temple Street to I-10 Freeway at White Avenue)
2. San Gabriel River Reach 1 (Firestone Avenue to Estuary).
3. San Gabriel River Reach 2 (Whittier Narrows to Firestone Avenue), and upstream reaches and tributaries

**Table 18. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Wet-Weather**

| Reaches                 | Units | Copper, TR |              | Lead, TR   |              | Zinc, TR   |              |
|-------------------------|-------|------------|--------------|------------|--------------|------------|--------------|
|                         |       | Max. Daily | Avg. Monthly | Max. Daily | Avg. Monthly | Max. Daily | Avg. Monthly |
| SJC R-1, 2 <sup>1</sup> | µg/L  |            |              |            |              |            |              |
| SGR R-1 <sup>2</sup>    | µg/L  |            |              |            |              |            |              |
| SGR R 2 <sup>3</sup>    | µg/L  |            |              | 166        | 83           |            |              |
| Coyote Creek            | µg/L  | 15         | 7.5          | 87         | 43           | 125        | 62           |
| Estuary                 | µg/L  |            |              |            |              |            |              |

1. San Jose Creek Reach 1 (Confluence to Temple Street) and San Jose Reach 2 (Temple Street to I-10 Freeway at White Avenue)
2. San Gabriel River Reach 1 (Firestone Avenue to Estuary).
3. San Gabriel River Reach 2 (Whittier Narrows to Firestone Avenue), and upstream reaches and tributaries

**Table 19. WQBELs based on Basin Plan section 7-9 – Santa Clara River Nitrogen Compounds TMDL**

| Reaches  | Ammonia Effluent Limitations (mg/L) |                 |
|--|-------------------------------------|-----------------|
|  | Maximum Daily                       | Average Monthly |
| Reach 3 (Between A Street, Fillmore and Freeman Diversion)           | 4.2                                 | 2.0             |
| Reach 7 (Between Lang gaging station and Bouquet Canyon Road Bridge) | 5.2                                 | 1.75            |

**Table 20. WQBELs based on Basin Plan section 7-16 - Calleguas Creek Watershed Toxicity TMDL WLAs**

| Parameters   | Units | Effluent Limitations |              |                |
|--------------|-------|----------------------|--------------|----------------|
|              |       | Max. Daily           | Avg. Monthly | Toxicity Limit |
| Chlorpyrifos | µg/L  | 0.025                | 0.014        |                |
| Diazinon     | µg/L  | 0.10                 | 0.10         |                |
| Toxicity     | TUc   |                      |              | 1              |

**Table 21. WQBELs based on Basin Plan section 7-17 - Calleguas Creek Organochlorine Pesticides, Polychlorinated Biphenyls, and Siltation TMDL WLAs**

| Constituents | Units | Effluent Limitations |                 |
|--------------|-------|----------------------|-----------------|
|              |       | Maximum Daily        | Average Monthly |
| Chlordane    | ng/L  | 1.2                  | 0.59            |
| 4,4-DDD      | ng/L  | 1.7                  | 0.84            |
| 4,4-DDE      | ng/L  | 1.2                  | 0.59            |
| 4,4-DDT      | ng/L  | 1.2                  | 0.59            |
| Dieldrin     | ng/L  | 0.28                 | 0.14            |
| PCBs         | ng/L  | 0.34                 | 0.17            |
| Toxaphene    | ng/L  | 0.33                 | 0.16            |



**Table 22. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed  
Metals and Selenium TMDL WLAs –Dry and Wet Weather**

| Constituents | Units | Effluent Limitations |                 |
|--------------|-------|----------------------|-----------------|
|              |       | Maximum Daily        | Average Monthly |
| Mercury      | µg/L  | 0.1                  | 0.051           |

**Table 23. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed  
Metals and Selenium TMDL WLAs – Dry Weather**

| Reaches                              | Units | Copper <sup>1, 2</sup> |              | Nickel <sup>3</sup> |              | Selenium   |              |
|--------------------------------------|-------|------------------------|--------------|---------------------|--------------|------------|--------------|
|                                      |       | Max. Daily             | Avg. Monthly | Max. Daily          | Avg. Monthly | Max. Daily | Avg. Monthly |
| 1-Mabu Lagoon                        | µg/L  | 6.1                    | 3.0          | 13.5                | 6.7          | ----       | -----        |
| 2-Calleguas Creek South              | µg/L  | 6.1                    | 3.0          | 13.5                | 6.7          | ----       | -----        |
| 3-Revolon Slough                     | µg/L  | 44                     | 22           | 244                 | 122          | ----       | -----        |
| 4-Calleguas Creek North              | µg/L  | 6.1                    | 3.0          | 13.6                | 6.8          | 8.2        | 4.1          |
| 5-Beardsley Channel                  | µg/L  | 6.1                    | 3.0          | 13.6                | 6.8          | 8.2        | 4.1          |
| 9-Conejo Creek                       | µg/L  | 48                     | 24           | 262                 | 131          | ----       | -----        |
| 10-Hill Canyon reach of Conejo Creek | µg/L  | 48                     | 24           | 262                 | 131          | ----       | -----        |
| 11-Arroyo Santa Rosa                 | µg/L  | 48                     | 24           | 262                 | 131          | ----       | -----        |
| 12-North Fork Conejo Creek           | µg/L  | 48                     | 24           | 262                 | 131          | ----       | -----        |
| 13-Arroyo Conejo (S.Fork Conejo Cr)  | µg/L  | 48                     | 24           | 262                 | 131          | ----       | -----        |

Notes:

1. Site Specific Water-Effect Ratios (WER) for copper have been developed by the Regional Water Board for Reach1 (WER = 1.51) and Reach 2 (WER = 3.69). The effluent limitations for copper for these two reaches have been recalculated based on WERs.
2. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.96 for freshwater reaches and 0.83 for salt water reaches.
3. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.997 for freshwater reaches and 0.99 for salt water reaches.

**Table 24. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs –Wet Weather**

| Reaches                              | Units | Copper <sup>1, 2</sup> |              | Nickel <sup>3</sup> |              | Selenium   |              |
|--------------------------------------|-------|------------------------|--------------|---------------------|--------------|------------|--------------|
|                                      |       | Max. Daily             | Avg. Monthly | Max. Daily          | Avg. Monthly | Max. Daily | Avg. Monthly |
| 1-Mabu Lagoon                        | µg/L  | 5.8                    | 2.9          | 74                  | 37           | ----       | -----        |
| 2-Calleguas Creek South              | µg/L  | 5.8                    | 2.9          | 74                  | 37           | ----       | -----        |
| 3-Revolon Slough                     | µg/L  | 27.4                   | 13.7         | 858                 | 427          | ----       | -----        |
| 4-Calleguas Creek North              | µg/L  | 5.8                    | 2.9          | 75                  | 37           | 289        | 144          |
| 5-Beardsley Channel                  | µg/L  | 5.8                    | 2.9          | 75                  | 37           | 289        | 144          |
| 9-Conejo Creek                       | µg/L  | 31                     | 15           | 956                 | 477          | ----       | -----        |
| 10-Hill Canyon reach of Conejo Creek | µg/L  | 31                     | 15           | 956                 | 477          | ----       | -----        |
| 11-Arroyo Santa Rosa                 | µg/L  | 31                     | 15           | 956                 | 477          | ----       | -----        |
| 12-North Fork Conejo Creek           | µg/L  | 43                     | 21           | 1294                | 645          | ----       | -----        |
| 13-Arroyo Conejo (S.Fork Conejo Cr)  | µg/L  | 43                     | 21           | 1294                | 645          | ----       | -----        |

Notes:

1. Site Specific Water-Effect Ratios (WER) for copper have been developed by the Regional Water Board for Reach1 (WER = 1.51) and Reach 2 (WER = 3.69). The effluent limitations for copper for these two reaches have been recalculated based on WERs.
2. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.96 for freshwater reaches and 0.83 for salt water reaches.
3. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.997 for freshwater reaches and 0.99 for salt water reaches.

**Table 25. WQBELs based on Basin Plan section 7-37 – McGrath Lake PCBs, Pesticides and Sediment Toxicity TMDL WLAs, Portion of Sediment Toxicity**

| Constituents | Units     | Effluent Limitations* |
|--------------|-----------|-----------------------|
| Chlordane    | µg/kg dry | 0.50                  |
| Dieldrin     | µg/kg dry | 0.02                  |
| Lead         | µg/kg dry | 46,700.00             |
| Zinc         | µg/kg dry | 150,000.00            |
| PAHs         | µg/kg dry | 4,022.00              |
| PCBs         | µg/kg dry | 22.70                 |
| DDT          | µg/kg dry | 1.58                  |

\*: See Section VIII. H. for compliance determination.

**Table 26. WQBELs based on Basin Plan section 7-10 Malibu Creek and Lagoon, section 7-11 Los Angeles Harbor (Inner Cabrillo Beach and Main Ship Channel), section 7-5 Marina del Rey Harbor Mothers' Beach and Back Basin, section 7-28 Harbor Beaches of Ventura County (Kiddie Beach and Hobie Beach), section 7-36 Santa Clara River Estuary and Reaches 3,5,6, and 7, and USEPA's Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL WLAs**

| Parameters            | Units      | Effluent Limitations |               |
|-----------------------|------------|----------------------|---------------|
|                       |            | Geometric Mean       | Single Sample |
| Total Coliform (T)    | MPL/100 mL | 1,000                | 10,000        |
| Fecal Coliform (F)    | MPL/100 mL | 200                  | 400           |
| Enterococcus          | MPL/100 mL | 35                   | 104           |
| If ratio of F/T > 0.1 | MPL/100 mL | ---                  | 1,000         |

2. The pH of the discharge shall at all times be within the range of 6.5 and 8.5.
3. The temperature of the discharge shall not exceed 86°F.
4. Attachment B establishes the applicable effluent limitations for mineral and nitrogen constituents for discharges covered by this Order. The discharge of mineral and nitrogen constituents in excess of applicable limitations established in Attachment B is prohibited. In the letter of determination, the Executive Officer shall indicate the watershed/stream reach limitations in Attachment B applicable to the particular discharge. Creekside construction dewatering discharges covered under Part D.2.d.vi are determined to have hydrologic connection and/or similar water chemistry between groundwater and surface water. Therefore, since the groundwater and surface water are essentially the same, discharges qualified under creekside dewatering as approved by Executive Office are not required to comply with Attachment B (TDS, sulfate, chloride) except for nitrogen and boron.
5. Pass-through or uncontrollable discharges of PCBs shall not exceed daily average concentrations of 14 ng/L into fresh waters or 30 ng/L into estuarine waters.
6. The acute toxicity of the effluent shall be such that the average monthly survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test less than 70% survival.
7. The discharge shall meet effluent limitations and toxic and effluent standards established pursuant to sections 301, 302, 304, 306, and 307 of the CWA, and amendments thereto.

**B. Land Discharge Specifications (Not Applicable)**

**C. Reclamation Specifications (Not Applicable)**

## VI. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitations

Receiving water limitations are based on water quality objectives/criteria contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the receiving waterbody.

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.2 units in bays and estuaries or 0.5 units in inland surface waters.
2. Surface water temperature to rise greater than 5° F above the natural temperature of the receiving waters at any time or place. At no time shall the temperature be raised above 80°F as a result of waste discharged.
3. The waste discharged shall not cause the log mean limits of bacteria to be exceeded in Table 27 for freshwater receiving water and in Table 28 for saltwater receiving water with REC-1 designated beneficial use.

**Table 27. Freshwater Bacteria Limitations**

| Parameters                    | Units      | Receiving Water Limitations |               |
|-------------------------------|------------|-----------------------------|---------------|
|                               |            | Geometric Mean              | Single Sample |
| E. coli                       | MPN/100 mL | 126                         | 235           |
| E. coli* (Ballona Creek only) | MPN/100 mL | 126                         | 576           |

\*: E. coli limitations for Ballona Creek with designated beneficial use of Limited Contact Recreation (LREC-1).

**Table 28. Saltwater Water Bacteria Limitations**

| Parameters                    | Units      | Receiving Water Limitations |               |
|-------------------------------|------------|-----------------------------|---------------|
|                               |            | Geometric Mean              | Single Sample |
| Total Coliform                | MPN/100 mL | 1,000                       | 10,000        |
| Fecal Coliform                | MPN/100 mL | 200                         | 400           |
| Enterococcus                  | MPN/100 mL | 35                          | 104           |
| If Fecal/Total Coliform > 0.1 | MPN/100 mL | - - -                       | 1,000         |

4. The discharge shall not cause the following to occur in the receiving waters:
  - a. The dissolved oxygen to be depressed below:
 

|  |        |
|--|--------|
| WARM <sup>1</sup> designated waters          | 5 mg/L |
| COLD <sup>1</sup> designated waters          | 6 mg/L |
| COLD and SPWN <sup>1</sup> Designated waters | 7 mg/L |

<sup>1</sup> Beneficial Uses: WARM - Warm Freshwater Habitat; COLD - Cold Freshwater Habitat; SPWN - Spawning, Reproduction, and/or Early Development

5. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
6. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
7. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
8. Toxic or other deleterious substances in concentrations or quantities that cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
9. Accumulation of bottom deposits or aquatic growths.
10. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
11. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
12. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
13. Alteration of turbidity, or apparent color beyond present natural background levels.
14. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
15. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
16. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
17. Create nuisance, or adversely affect beneficial uses of the receiving water.
18. Violation of any applicable water quality objective/criteria for receiving waters adopted by the Regional Water Board, State Water Board, or USEPA. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

**B. Groundwater Limitations (Not Applicable)**

**VII. PROVISIONS**

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR sections 122.41 and 122.42, are included in this Order. The Discharger must comply with all Standard Provisions and with those additional conditions that are applicable under 40 CFR section 122.42. The Regional Water Board has also provided in this Order special provisions applicable to the Dischargers authorized by this Order. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

## **A. Standard Provisions**

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order. If there is any conflict between provisions stated herein and the Standard Provisions in Attachment D, the provisions stated herein prevail.
2. The Discharger shall comply with the following provisions:
  - a. The Executive Officer may require any discharger authorized under this Order to apply for and obtain an individual NPDES permit with more specific requirements. The Executive Officer may require any discharger authorized to discharge under this Order to apply for an individual permit only if the Discharger has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the Discharger to file the application, and a statement that on the effective date of the individual permit, the authority to discharge under this Order is no longer applicable.
  - b. Prior to application, the Discharger shall submit for Executive Officer's approval the list of chemicals and proprietary additives that may affect the discharge, including rates/quantities of application, compositions, characteristics, and material safety data sheets, if any.
  - c. Oil or oily materials, chemicals, refuse, or other materials that may cause pollution in storm water and/or urban runoff shall not be stored or deposited in areas where they may be picked up by rainfall/urban runoff and discharged to surface waters. Any spill of such materials shall be contained, removed and cleaned immediately.
  - d. This Order neither exempts the Discharger from compliance with any other laws, regulations, or ordinances that may be applicable, nor legalizes the waste disposal facility.
  - e. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.
  - f. Any discharge authorized under this Order may request to be excluded from the coverage of this Order by applying for an individual permit.

## **B. Monitoring and Reporting Program Requirements**

The Executive Officer is hereby authorized to prescribe a Monitoring and Reporting Program for each authorized discharger. The Discharger shall comply with the MRP accompanying the transmittal for enrollment under this General Permit, and future revisions thereto. If there is any conflict between provisions stated in the MRP and the Regional Water Board Standard Provisions, those provisions stated in the MRP shall prevail.

## **C. Enforcement**

1. Violation of any of the provisions of this Order may subject the Discharger to any of the penalties described herein or in Attachment D of this Order, or any combination thereof, at the discretion of the prosecuting authority.
2. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges authorized by this Order, may subject the Discharger to administrative or judicial civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

3. The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.
4. California Water Code section 13385(h)(1) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each serious violation. Pursuant to California Water Code section 13385(h)(2), a “serious violation” is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR section 123.45 specifies the Group I and II pollutants. Pursuant to California Water Code section 13385.1(a)(1), a “serious violation” is also defined as “a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.”
5. California Water Code section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.
6. Pursuant to California Water Code section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, “effluent limitation” means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim, and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.

## **D. Special Provisions**

### **1. Reopener Provisions**

- a. This Order may be modified, revoked and reissued, or terminated for cause. Reasons for modification may include new information on the impact of discharges regulated under this Order become available, promulgation of new effluent standards and/or regulations, adoption of new policies and/or water quality objectives, and/or new judicial decisions affecting requirements of this Order.
- b. Pursuant to 40 CFR sections 122.62 and 122.63, this Order may be modified, revoked and reissued, or terminated for cause. Reasons for modification may include new information on the impact of discharges regulated under this Order become available, promulgation of new effluent standards and/or regulations, adoption of new policies and/or water quality objectives, and/or new judicial decisions affecting requirements of this Order. In addition, if receiving water quality is threatened due to discharges covered under this General Permit, this General

Permit will be reopened to incorporate more stringent effluent limitations for the constituents creating the threat. TMDLs have not been developed for all the parameters and receiving waters on the CWA section 303(d) list. When TMDLs are developed this General Permit may be reopened to incorporate appropriate limits. In addition, if a TMDL identifies that a particular discharge covered under this General Permit is a load that needs to be reduced; this General Permit will be reopened to incorporate appropriate TMDL based limit and/or to remove any applicable exemptions.

**E. Special Studies, Technical Reports and Additional Monitoring Requirements (Not Applicable)**

**F. Best Management Practices of Pollution Prevention**

All Dischargers are encouraged to implement Best Management Practices and Pollution Prevention Plans to minimize pollutant concentrations in the discharge.

**G. Construction, Operation and Maintenance Specifications**

All owners or operators authorized to discharge under this General Permit shall maintain and update, as necessary, a Groundwater Treatment System Operation and Maintenance (O&M) Manual to assure efficient and effective treatment of contaminated groundwater (pollutants concentrations above water quality criteria and goals). At a minimum, the O&M Manual shall address the following:

1. The O&M manual shall specify both normal operating and critical maximum or minimum values for treatment process variables including influent concentrations, flow rates, water levels, temperatures, time intervals, and chemical feed rates.
2. The O&M manual shall specify an inspection and maintenance schedule for active and reserve system and shall provide a log sheet format to document inspection observations and record completion of maintenance tasks.
3. The O&M manual shall include a Contingency and Notification Plan. The plan shall include procedures for reporting personnel to assure compliance with this General Permit, as well as authorization letters from the Executive Officer.
4. The O&M manual shall specify safeguards to prevent noncompliance with limitations and requirements of the General Permit resulting from equipment failure, power loss, vandalism, or ten-year return frequency rainfall.

**H. Engineering Design Report**

For all new dischargers and existing dischargers where significant changes have made since prior submittals to the Regional Water Board, the NOI shall be accompanied by treatment flow schematic diagram and a certification, which demonstrates that the treatment process and the physical design of the treatment components will ensure compliance with the prohibitions, effluent limitations, and other conditions of the General Permit.

**I. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)**

**J. Other Special Provisions**

**1. Expiration and Continuation of this Order**

This Order expires on July 6, 2018; however, for those dischargers authorized to discharge under this Order, it shall continue in full force and effect until the Regional Water Board adopts a new order. Notwithstanding Provision 8.a. (Expiration Date and Continuation of this Order) of Order No. R4-2008-0032, discharges regulated under Order No. R4-2008-0032 on or before the sixtieth day of notification of adoption of this



Order, that has submitted a completed NOI may continue to be regulated under Order No. R4-2008-0032 until enrolled under this General Permit.

**2. Reauthorization**

Upon reissuance of a new order, dischargers authorized under this Order shall file a Notice of Intent or a new Report of Waste Discharge within 60 days of notification by the Executive Officer.

**3. Superseding**

Except for enforcement purposes, Order No. R4-2008-0032, adopted by this Regional Water Board on June 5, 2008, is superseded by this Order effective July 6, 2013.

**K. Compliance Schedules (Not Applicable)**

**VIII. COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in Part IV of this Order will be determined as specified below:

**A. General.**

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Appendix A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

**B. Multiple Sample Data.**

When determining compliance with an Average Monthly Effluent Limitation or Maximum Daily Effluent Limitation for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

**C. Average Monthly Effluent Limitation (AMEL).**

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of

compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**D. Average Weekly Effluent Limitation (AWEL).**

If the average < (or when applicable, the median determined by subsection B above for multiple sample data)> of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance on days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**E. Maximum Daily Effluent Limitation (MDEL).**

If a daily discharge exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

**F. Instantaneous Minimum Effluent Limitation.**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

**G. Instantaneous Maximum Effluent Limitation.**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

**H. Limitations Based on Sediment TMDLs.**

Where sediment based effluent limitations is applicable discharger are allowed to demonstrate compliance with sediment TMDL limitations by complying with the TSS effluent limitation and CTR based toxic effluent limitation for the sediment based TMDL toxics of concern.

If the effluent analysis satisfies condition A or B as listed below, the Discharger has demonstrated compliance with the sediment limitations. Therefore, no further sediment monitoring is required.

Condition A: Does not exceed TSS effluent limits and the CTR values of the sediment TMDL priority pollutants (Sediment-CTR Values). Table showing the CTR values of the priority pollutants targeted in the TMDLs covered in this Order is in the Appendix B of the Order;

Condition B: Exceeds TSS effluent limits, but does not exceed the Sediment-CTR Values.

When both TSS and the Sediment-CTR Values are exceeded, an accelerated monitoring program for TSS and the exceeded priority pollutant(s) shall be implemented in the following week when the exceedances are observed.

If two consecutive effluent sampling events show exceedance for both TSS and the Sediment-CTR value(s), the Discharger is determined to be non-compliance with sediment based effluent limitation. Thereafter, sediment based effluent monitoring shall be implemented as prescribed in the Monitoring and Reporting Program for the rest of the permitting cycle.

However, if two successive sampling events show compliance with TSS and the sediment-CTR value(s), the discharge shall continue with regular effluent monitoring in accordance with the MRP.

## APPENDIX A

### SWRCB Minimum Levels in ppb (µg/L)

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the SWRCB and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs.

| Table 2a - VOLATILE SUBSTANCES* | GC  | GCMS |
|---------------------------------|-----|------|
| 1,1 Dichloroethane              | 0.5 | 1    |
| 1,1 Dichloroethene              | 0.5 | 2    |
| 1,1,1 Trichloroethane           | 0.5 | 2    |
| 1,1,2 Trichloroethane           | 0.5 | 2    |
| 1,1,2,2 Tetrachloroethane       | 0.5 | 1    |
| 1,2 Dichlorobenzene (volatile)  | 0.5 | 2    |
| 1,2 Dichloroethane              | 0.5 | 2    |
| 1,2 Dichloropropane             | 0.5 | 1    |
| 1,3 Dichlorobenzene (volatile)  | 0.5 | 2    |
| 1,3 Dichloropropene (volatile)  | 0.5 | 2    |
| 1,4 Dichlorobenzene (volatile)  | 0.5 | 2    |
| Acrolein                        | 2.0 | 5    |
| Acrylonitrile                   | 2.0 | 2    |
| Benzene                         | 0.5 | 2    |
| Bromoform                       | 0.5 | 2    |
| Bromomethane                    | 1.0 | 2    |
| Carbon Tetrachloride            | 0.5 | 2    |
| Chlorobenzene                   | 0.5 | 2    |
| Chlorodibromo-methane           | 0.5 | 2    |
| Chloroethane                    | 0.5 | 2    |
| Chloroform                      | 0.5 | 2    |
| Chloromethane                   | 0.5 | 2    |
| Dichlorobromo-methane           | 0.5 | 2    |
| Dichloromethane                 | 0.5 | 2    |
| Ethylbenzene                    | 0.5 | 2    |
| Tetrachloroethene               | 0.5 | 2    |
| Toluene                         | 0.5 | 2    |
| Trans-1,2 Dichloroethylene      | 0.5 | 1    |
| Trichloroethene                 | 0.5 | 2    |
| Vinyl Chloride                  | 0.5 | 2    |

\*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

| Table 2b - SEMI-VOLATILE SUBSTANCES* | GC | GCMS | LC   | COLOR |
|--------------------------------------|----|------|------|-------|
| 1,2 Benzantracene                    | 10 | 5    |      |       |
| 1,2 Dichlorobenzene (semivolatile)   | 2  | 2    |      |       |
| 1,2 Diphenylhydrazine                |    | 1    |      |       |
| 1,2,4 Trichlorobenzene               | 1  | 5    |      |       |
| 1,3 Dichlorobenzene (semivolatile)   | 2  | 1    |      |       |
| 1,4 Dichlorobenzene (semivolatile)   | 2  | 1    |      |       |
| 2 Chlorophenol                       | 2  | 5    |      |       |
| 2,4 Dichlorophenol                   | 1  | 5    |      |       |
| 2,4 Dimethylphenol                   | 1  | 2    |      |       |
| 2,4 Dinitrophenol                    | 5  | 5    |      |       |
| 2,4 Dinitrotoluene                   | 10 | 5    |      |       |
| 2,4,6 Trichlorophenol                | 10 | 10   |      |       |
| 2,6 Dinitrotoluene                   |    | 5    |      |       |
| 2- Nitrophenol                       |    | 10   |      |       |
| 2-Chloroethyl vinyl ether            | 1  | 1    |      |       |
| 2-Chloronaphthalene                  |    | 10   |      |       |
| 3,3' Dichlorobenzidine               |    | 5    |      |       |
| 3,4 Benzofluoranthene                |    | 10   | 10   |       |
| 4 Chloro-3-methylphenol              | 5  | 1    |      |       |
| 4,6 Dinitro-2-methylphenol           | 10 | 5    |      |       |
| 4- Nitrophenol                       | 5  | 10   |      |       |
| 4-Bromophenyl phenyl ether           | 10 | 5    |      |       |
| 4-Chlorophenyl phenyl ether          |    | 5    |      |       |
| Acenaphthene                         | 1  | 1    | 0.5  |       |
| Acenaphthylene                       |    | 10   | 0.2  |       |
| Anthracene                           |    | 10   | 2    |       |
| Benzidine                            |    | 5    |      |       |
| Benzo(a) pyrene(3,4 Benzopyrene)     |    | 10   | 2    |       |
| Benzo(g,h,i)perylene                 |    | 5    | 0.1  |       |
| Benzo(k)fluoranthene                 |    | 10   | 2    |       |
| bis 2-(1-Chloroethoxyl) methane      |    | 5    |      |       |
| bis(2-chloroethyl) ether             | 10 | 1    |      |       |
| bis(2-Chloroisopropyl) ether         | 10 | 2    |      |       |
| bis(2-Ethylhexyl) phthalate          | 10 | 5    |      |       |
| Butyl benzyl phthalate               | 10 | 10   |      |       |
| Chrysene                             |    | 10   | 5    |       |
| di-n-Butyl phthalate                 |    | 10   |      |       |
| di-n-Octyl phthalate                 |    | 10   |      |       |
| Dibenzo(a,h)-anthracene              |    | 10   | 0.1  |       |
| Diethyl phthalate                    | 10 | 2    |      |       |
| Dimethyl phthalate                   | 10 | 2    |      |       |
| Fluoranthene                         | 10 | 1    | 0.05 |       |
| Fluorene                             |    | 10   | 0.1  |       |
| Hexachloro-cyclopentadiene           | 5  | 5    |      |       |
| Hexachlorobenzene                    | 5  | 1    |      |       |
| Hexachlorobutadiene                  | 5  | 1    |      |       |
| Hexachloroethane                     | 5  | 1    |      |       |

| Table 2b - SEMI-VOLATILE SUBSTANCES* | GC | GCMS | LC   | COLOR |
|--------------------------------------|----|------|------|-------|
| Indeno(1,2,3,cd)-pyrene              |    | 10   | 0.05 |       |
| Isophorone                           | 10 | 1    |      |       |
| N-Nitroso diphenyl amine             | 10 | 1    |      |       |
| N-Nitroso-dimethyl amine             | 10 | 5    |      |       |
| N-Nitroso -di n-propyl amine         | 10 | 5    |      |       |
| Naphthalene                          | 10 | 1    | 0.2  |       |
| Nitrobenzene                         | 10 | 1    |      |       |
| Pentachlorophenol                    | 1  | 5    |      |       |
| Phenanthrene                         |    | 5    | 0.05 |       |
| Phenol **                            | 1  | 1    |      | 50    |
| Pyrene                               |    | 10   | 0.05 |       |

\* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

\*\* Phenol by colorimetric technique has a factor of 1.

| Table 2c – INORGANICS* | FAA | GFAA | ICP | ICPMS | SPGFAA | HYDRIDE | CVAA | COLOR | DCP    |
|------------------------|-----|------|-----|-------|--------|---------|------|-------|--------|
| Antimony               | 10  | 5    | 50  | 0.5   | 5      | 0.5     |      |       | 1,000  |
| Arsenic                |     | 2    | 10  | 2     | 2      | 1       |      | 20    | 1,000  |
| Beryllium              | 20  | 0.5  | 2   | 0.5   | 1      |         |      |       | 1,000  |
| Cadmium                | 10  | 0.5  | 10  | 0.25  | 0.5    |         |      |       | 1,000  |
| Chromium (total)       | 50  | 2    | 10  | 0.5   | 1      |         |      |       | 1,000  |
| Chromium VI            | 5   |      |     |       |        |         |      | 10    |        |
| Copper                 | 25  | 5    | 10  | 0.5   | 2      |         |      |       | 1,000  |
| Cyanide                |     |      |     |       |        |         |      | 5     |        |
| Lead                   | 20  | 5    | 5   | 0.5   | 2      |         |      |       | 10,000 |
| Mercury                |     |      |     | 0.5   |        |         | 0.2  |       |        |
| Nickel                 | 50  | 5    | 20  | 1     | 5      |         |      |       | 1,000  |
| Selenium               |     | 5    | 10  | 2     | 5      | 1       |      |       | 1,000  |
| Silver                 | 10  | 1    | 10  | 0.25  | 2      |         |      |       | 1,000  |
| Thallium               | 10  | 2    | 10  | 1     | 5      |         |      |       | 1,000  |
| Zinc                   | 20  |      | 20  | 1     | 10     |         |      |       | 1,000  |

\* The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

| Table 2d – PESTICIDES – PCBs* | GC    |
|-------------------------------|-------|
| 4,4'-DDD                      | 0.05  |
| 4,4'-DDE                      | 0.05  |
| 4,4'-DDT                      | 0.01  |
| a-Endosulfan                  | 0.02  |
| a-Hexachloro-cyclohexane      | 0.01  |
| Aldrin                        | 0.005 |
| b-Endosulfan                  | 0.01  |
| b-Hexachloro-cyclohexane      | 0.005 |
| Chlordane                     | 0.1   |

|                                   |       |
|-----------------------------------|-------|
| d-Hexachloro-cyclohexane          | 0.005 |
| Dieldrin                          | 0.01  |
| Endosulfan Sulfate                | 0.05  |
| Endrin                            | 0.01  |
| Endrin Aldehyde                   | 0.01  |
| Heptachlor                        | 0.01  |
| Heptachlor Epoxide                | 0.01  |
| Lindane(g-Hexachloro-cyclohexane) | 0.02  |
| PCB 1016                          | 0.5   |
| PCB 1221                          | 0.5   |
| PCB 1232                          | 0.5   |
| PCB 1242                          | 0.5   |
| PCB 1248                          | 0.5   |
| PCB 1254                          | 0.5   |
| PCB 1260                          | 0.5   |
| Toxaphene                         | 0.5   |

- \* The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

**Techniques:**

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR – Colorimetric

## **APPENDIX- B**

**Effluent Limitations based on CTR and SIP procedures for the those Metals and Organics Listed in TMDLs; Ballona Creek Estuary Toxics TMDLS, Dominguez Channel Estuary, Los Angeles and Long Beach Harbors TMDLs and Marina Del Rey Harbor Toxics TMDLs that Requires sediment analysis<sup>5</sup>**

| Constituents | Units | Effluent Limitations |              |
|--------------|-------|----------------------|--------------|
|              |       | Daily Max.           | Monthly Avg. |
| Cadmium      | µg/L  | 5                    | ---          |
| Copper       | µg/L  | 5.8                  | 2.9          |
| Lead         | µg/L  | 14                   | 7            |
| Silver       | µg/L  | 2.2                  | 1.1          |
| Zinc         | µg/L  | 95                   | 47           |
| Chlordane    | µg/L  | 0.00126              | 0.00059      |
| 4,4'-DDT     | µg/L  | 0.00126              | 0.00059      |
| 4,4'-DDT     | µg/L  | 0.00126              | 0.00059      |
| 4,4'-DDD     | µg/L  | 0.0017               | 0.00084      |
| Total PCBs   | µg/L  | 0.00034              | 0.00017      |
| Total PAHs   | µg/L  | NA                   | NA           |

---

<sup>5</sup> Compliance for TSS and the toxics pollutants in the effluent must be demonstrated to satisfy the compliance requirements for sediment Waste Load allocations for toxic pollutants listed in the respective TMDLs.



## **D.5 Region 5. Central Valley Regional Water Quality Control Board**

Order No. R5-2013-0074. NPDES No. CAG995001 Waste Discharge Requirements for Dewatering and Other Low Threat Discharges to Surface Waters

Resolution No. R5-2013-0145. Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge within the Central Valley Region

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# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

## CENTRAL VALLEY REGION

11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114  
Phone (916) 464-3291 • Fax (916) 464-4645  
<http://www.waterboards.ca.gov/centralvalley>

**ORDER R5-2013-0074**  
**NPDES NO. CAG995001**

### **WASTE DISCHARGE REQUIREMENTS FOR DEWATERING AND OTHER LOW THREAT DISCHARGES TO SURFACE WATERS**

The following Dischargers are subject to waste discharge requirements as set forth in this Order (as authorized by the Notice of Applicability):

**Table 1. Discharger Information**

|   |   |
|---|---|
| <b>Dischargers</b>  | Individuals, public agencies, private businesses, and other legal entities (hereafter Dischargers) of clean or relatively pollutant-free wastewaters that pose little or no threat to the quality of waters of the United States. Discharges covered by this General Order are either 4 months or less in duration or have a daily average discharge flow less than 0.25 million gallons per day (MGD). |
| The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified these discharges as minor discharges. |   |

**Table 2. Administrative Information**

|   |             |
|---|-------------|
| This Order was adopted by the Regional Water Quality Control Board on:  | 31 May 2013 |
| This Order shall become effective on:   | 31 May 2013 |
| This Order shall expire on:   | 1 May 2018  |
| Those enrollees who are covered under this Order at the time of expiration will continue to be covered until coverage becomes effective under a reissued Order. |             |

I, Pamela C. Creedon, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 31 May 2013.

*ORIGINAL SIGNED BY KEN D. LANDAU FOR*

---

PAMELA C. CREEDON, Executive Officer

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## **I. DISCHARGE INFORMATION**

Individuals, public agencies, private businesses, and other legal entities often need to discharge clean or relatively pollutant-free wastewater that poses little or no threat to water quality. These discharges are often short-term and low volume in nature.

Water suppliers may have numerous intentional and unintentional releases of fresh water to surface waters and surface water drainage courses due to many factors, including system failures, pressure releases, and pipeline/tank flushing and dewatering. For the purpose of this Order, these multiple discharges from water suppliers shall be considered a project. Public and private water suppliers, such as irrigation districts, water districts, and water agencies, may apply for coverage under this General Order.

This General Order covers certain categories of dewatering and other low threat discharges to waters of the United States, which are either 4 months or less in duration or have a daily average discharge flow that does not exceed 0.25 million gallons per day (MGD).

## **II. NOTIFICATION REQUIREMENTS**

### **A. General Order Application**

To obtain coverage under this General Order, which also serves as the National Pollutant Discharge Elimination System (NPDES) Permit, the Discharger must submit a complete Notice of Intent to the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), as detailed in Attachment G. The Notice of Intent requires the Discharger to submit the following: (1) information concerning its discharge location; (2) a map showing the location of the site, treatment system (if applicable), discharge point(s), and receiving water; (3) an evaluation of reclamation options; (4) narrative and schematic descriptions of the existing or proposed treatment system, including blueprints signed by a Registered Engineer or Geologist (if applicable); (5) analysis of the proposed effluent for pollutants listed in Attachment B, Attachment C (if applicable), and any applicable 303(d) listed pollutants for the receiving water if discharging or proposing to discharge to an impaired waterbody; and (6) the appropriate fee. Dischargers applying for an exception to the analysis of the priority pollutants listed in Attachment B, as allowed by section 1.3, Step 8 and section 5.3 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP), shall submit the proper information with the Notice of Intent, as outlined in Attachment G. Water suppliers with a project that includes more than one existing or proposed discharge point must submit a Pollution Prevention and Monitoring and Reporting Plan with the Notice of Intent, as outlined in Attachment G.

### **B. General Order Coverage**

Upon receipt of the Notice of Intent, the Executive Officer shall determine the applicability of this Order to the discharge. If the discharge is deemed eligible for coverage, the Executive Officer shall issue a Notice of Applicability to the Discharger,

notifying the Discharger that the discharge is authorized under the terms and conditions of this Order. New discharges for which coverage under this General Order is being sought shall not commence until after receiving the Executive Officer's written Notice of Applicability or until the California Regional Water Quality Control Board, Central Valley Region (hereinafter Central Valley Water Board) has issued an individual NPDES permit for the discharge.

This General Order shall apply to the individuals, public agencies, private businesses, and other legal entities that have submitted a complete Notice of Intent and have received a Notice of Applicability from the Executive Officer.

Dischargers currently covered by General Order R5-2008-0081 are automatically granted coverage under this renewed General Order.

### **C. Eligibility Criteria**

1. This General Order covers dewatering and other low threat discharges to surface waters.
2. To be authorized by this General Order, Dischargers must demonstrate that the discharge or proposed discharge meets the following criteria:
  - a. Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an excursion above any applicable federal water quality criterion established by USEPA pursuant to CWA section 303;
  - b. Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an excursion above any water quality objective adopted by the Central Valley Water Board or State Water Resources Control Board (State Water Board), including prohibitions of discharge for the receiving waters; and
  - c. The discharge does not cause acute or chronic toxicity in the receiving water.
3. The Discharger shall comply with all the terms and provisions of this General Order.

### **D. Termination of Coverage**

1. Upon completion of treatment and cessation of the discharge, the Discharger shall request, in writing, official termination of coverage under this General Order from the Executive Officer. Upon submission of this request, the Discharger shall no longer be authorized to discharge wastewater covered by this General Order. The Discharger is subject to the terms and conditions of this General Order and is responsible for submitting the annual fee associated with this General Order until the Discharger submits a written request for official termination of coverage.
2. When the Central Valley Water Board issues an individual NPDES permit or Waste Discharge Requirements (WDRs) with more specific requirements to a Discharger,

the applicability of this General Order to that Discharger is automatically terminated on the effective date of the individual permit or WDRs.

3. Dischargers authorized to discharge under this General Order who have been granted an exception to the priority pollutant criteria and objectives in the California Toxics Rule (CTR) and SIP, as allowed by section 5.3 of the SIP, must provide certification by a qualified biologist that the beneficial uses of the receiving water have been restored upon completion of the discharge.

### III. FINDINGS

The Central Valley Water Board finds:

**A. Background.** Dischargers of dewatering and other low threat discharges to surface waters that are currently discharging pursuant to Order R5-2008-0081 and NPDES Permit No. CAG995001 are authorized under this General Order to continue their discharges to waters of the United States.

**B. Discharge Description.**

1. The dewatering and other low threat discharges that may be authorized by this General Order are clean or relatively pollutant-free wastewaters that pose little or no threat to water quality. This General Order covers discharges which are either 4 months or less in duration or have a daily average discharge flow of less than 0.25 MGD. Discharges that may be covered by this General Order include, but are not limited to the following:
  - a. Well development water;
  - b. Construction dewatering;
  - c. Pump/well testing;
  - d. Pipeline/tank pressure testing;
  - e. Pipeline/tank flushing or dewatering;
  - f. Condensate discharges;
  - g. Water supply system discharges; and
  - h. Miscellaneous dewatering/low threat discharges.

These wastewaters may be produced and treated on a continuous or batch basis.

2. Discharges that are not covered by this Order shall include the following:
  - a. Discharges to municipal wastewater collection systems;

- b. Discharges to ponds, infiltration basins, spray disposal areas, subsurface infiltration; or other methods not involving discharge to surface waters and surface water drainage courses;
- c. Discharges from groundwater cleanup projects, including sites polluted by industrial activity, underground leaking tanks, and farming practices;
- d. Discharges of groundwater which has been polluted by industrial activity, underground leaking tanks, or farming practices, even if the project and/or proponent has no connection with the contamination; and
- e. Discharges that cause acute or chronic toxicity and discharges that contain chemical or organic constituents, bacteria, herbicides, pesticides, oil and grease, radioactivity, salinity, or temperatures that may adversely impact beneficial uses or exceed any water quality objective or standard.

**C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges to surface waters of dewatering and other low threat wastewaters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

Section 122.28 of Title 40 of the *Code of Federal Regulations* (40 CFR 122.28) authorizes EPA and approved states to issue general permits to regulate a point source category, if the sources:

- 1. Involve the same or substantially similar types of operations;
- 2. Discharge the same type of waste;
- 3. Require the same type of effluent limitations or operating conditions;
- 4. Require similar monitoring; and
- 5. Are more appropriately regulated under a general permit rather than individual permits.

On 22 September 1989, USEPA granted the State of California, through the State Water Board and the Regional Water Boards, the authority to issue general NPDES permits pursuant to 40 CFR Parts 122 and 123.

**D. Background and Rationale for Requirements.** The Central Valley Water Board developed the requirements in this Order based on readily available information for several similar discharges and the requirements contained in Order R5-2008-0081. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through H are also incorporated into this Order.



- E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177, except requirements for “new sources”<sup>1</sup> as defined in the Federal Water Pollution Control Act. For any “new source” compliance with CEQA must be achieved before a Notice of Applicability for coverage under this General Order can be issued for the project.

The SIP at section 5.3 authorizes the Central Valley Water Board to grant categorical exceptions from meeting the priority pollutant criteria/objectives, if determined to be necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the Safe drinking water Act or California Health and Safety Code. Generally, discharges of potable water are done to fulfill California Department of Health and Safety statutory requirements, and to ensure steady and safe drinking water supply to end-users. The potable water discharges under this permit are mostly intermittent, short duration, high flow discharges that comply with California Department of Health and Safety Maximum Contaminant Levels, for protection of human health. Therefore, potable water discharges as qualified under this permit have been determined to pose no significant threat to water quality and meet the conditions for categorical exception under SIP. The Board’s actions on issuing this permit for existing and new potable water discharges, and on the exceptions is exempt from CEQA in accordance with California Code of Regulations, Title 14, Section 15061 (b)(3) which states that CEQA only applies to projects which have the potential for causing adverse environmental effects.

To satisfy the Categorical Exception requirements of Section 5.3 of the SIP, dischargers seeking enrollment under this General Order will be required to submit project-specific information to the Executive Officer on the discharge and its water quality effects. The information required by the SIP is included in the application requirements contained in section V of Attachment G.

- F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharges authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. Water Quality-Based Effluent Limitations (WQBELs).** Section 301(b) of the CWA and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all

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<sup>1</sup> A “new source” is a discharge type for which USEPA has issued New Source Performance Standards. A “new source” does not mean a new discharge.

pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

**H. Water Quality Control Plans.** The Central Valley Water Board adopted a Water Quality Control Plan, Fourth Edition (Revised October 2011), for the Sacramento and San Joaquin River Basins and a Water Quality Control Plan, Second Edition (Revised January 2004), for the Tulare Lake Basin (hereinafter Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives for all waters addressed through the plans. In addition, the Basin Plans implement State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The typical beneficial uses identified in the Basin Plans include the following: municipal and domestic supply; agricultural irrigation; stock watering; process supply; service supply; hydropower supply; water contact recreation; canoeing and rafting recreation; other non-contact water recreation; warm freshwater aquatic habitat; cold freshwater habitat; warm fish migration habitat; cold fish migration habitat; warm and cold spawning habitat; wildlife habitat; navigation; rare, threatened, or endangered species habitat; groundwater recharge; and freshwater replenishment.

The Basin Plans include a list of Water Quality Limited Segments (WQLSs), which are defined as “... *those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources (40 CFR 130, et seq.).*” The Basin Plans also state, “*Additional treatment beyond minimum federal standards will be imposed on dischargers to WQLSs. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment.*” Dischargers seeking coverage under this General Permit whose discharge is to a receiving water that is listed as a WQLS shall analyze the discharge for the applicable listed constituents, the results of which shall be included in the Discharger's Notice of Intent. The Central Valley Water Board will not authorize discharges under this General Order that would contribute to the further impairment of the WQLS.

**I. Bay-Delta Plan.** The Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) was adopted in May 1995 by the State Water Board, superseding the 1991 Bay-Delta Plan. The Bay-Delta Plan identifies the beneficial uses of the estuary and includes objectives for flow, salinity, and endangered species protection.

The State Water Board adopted Decision 1641 (D-1641) on 29 December 1999, and revised on 15 March 2000. D-1641 implements flow objectives for the Bay-Delta Estuary, approves a petition to change points of diversion of the Central Valley Project and the State Water Project, and approves a petition to change places of use and purposes of use of the Central Valley Project. The water quality objectives of the Bay-Delta Plan are implemented as part of this Order.

- J. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on 22 December 1992, and later amended it on 4 May 1995 and 9 November 1999. About 40 criteria in the NTR applied in California. On 18 May 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on 13 February 2001. These rules contain water quality criteria for priority pollutants.
- K. State Implementation Policy.** On 2 March 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on 28 April 2000 with respect to the priority pollutant criteria promulgated for California by USEPA through the NTR and to the priority pollutant objectives established by the Central Valley Water Board in the Basin Plans. The SIP became effective on 18 May 2000 with respect to the priority pollutant criteria promulgated by USEPA through the CTR. The State Water Board adopted amendments to the SIP on 24 February 2005 that became effective on 13 July 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control.

Section 5.3 of the SIP authorizes the Central Valley Water Board, after compliance with the California Environmental Quality Act (CEQA), to allow certain dischargers short-term or seasonal exceptions from meeting the priority pollutant criteria and objectives if the Central Valley Water Board determines the discharge is necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code.

This General Order authorizes a categorical exception to the criteria and objectives in the CTR and SIP for Dischargers who submit the information required by section 5.3 of the SIP as outlined in Attachment G and meet the exception criteria, as determined by the Central Valley Water Board. As required by the SIP, Dischargers authorized to discharge under this General Order with an exception to the priority pollutant criteria and objectives must provide certification by a qualified biologist that the receiving water beneficial uses have been restored upon completion of the project. This General Order requires full compliance with the requirements of the CTR and SIP for all other authorized discharges.

- L. Alaska Rule.** On 30 March 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes [40 CRR 131.21; 65 Fed. Reg. 24641 (27 April 2000)]. Under the revised

regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after 30 May 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by 30 May 2000 may be used for CWA purposes, whether or not approved by USEPA.

- M. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on 5-day biochemical oxygen demand (BOD<sub>5</sub>) and total suspended solids (TSS). This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. The WQBELs consist of restrictions on chlorine residual, pH, and settleable solids. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the CTR-SIP, which was approved by USEPA on 18 May 2000. All beneficial uses and water quality objectives contained in the Basin Plans were approved under state law and submitted to and approved by USEPA prior to 30 May 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to 30 May 2000, but not approved by USEPA before that date, are nonetheless "*applicable water quality standards for purposes of the [Clean Water] Act*" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

- N. Antidegradation Policy.** 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Central Valley Water Board's Basin Plans implement, and incorporate by reference, both the state and federal antidegradation policies. As described in the Fact Sheet (Attachment F), due to the short-term and low volume nature of discharge expected from discharges regulated under this General Order, the impact on existing water quality will be insignificant. If, however, the Central Valley Water Board, subsequent to review of any Notice of Intent, finds that the impact of a discharge will not be insignificant, then authorization for coverage under this General Order will be denied and coverage under an individual permit will be required (including preparation of an antidegradation analysis).

- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These

anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in previous Order R5-2008-0081.

- P. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limitations, receiving water limitations, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- Q. Monitoring and Reporting.** 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorize the Central Valley Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. The Monitoring and Reporting Program is provided in Attachment E.

The technical and monitoring reports in this Order are required in accordance with Water Code section 13267, which states the following in subsection (b)(1), *"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."*

The monitoring reports required by this Order are necessary to determine compliance with this Order. The need for the monitoring reports is discussed in the Fact Sheet.

- R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. The Central Valley Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the Fact Sheet.

- S. Notification of Interested Parties.** The Central Valley Water Board has notified interested agencies and persons of its intent to prescribe WDRs for dewatering and other low threat discharges to surface waters. Details of notification are provided in the Fact Sheet of this Order.
- T. Consideration of Public Comment.** The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to dewatering and other low threat discharges to surface waters. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED, that Order R5-2008-0081 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal CWA and regulations and guidelines adopted thereunder, Dischargers shall comply with the requirements in this Order.

#### **IV. DISCHARGE PROHIBITIONS**

- A.** The discharge of wastes other than those which meet eligibility criteria in Section II.C of this Order is prohibited unless the Discharger obtains coverage under another general or individual Order that regulates the discharge of such wastes.
- B.** The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions I.G. and I.H. (Attachment D).
- C.** Neither the discharge nor its treatment shall create a nuisance as defined in section 13050 of the CWC.
- D.** Discharge of polluted groundwater is prohibited.
- E.** Discharges having a daily average discharge flow exceeding 0.25 MGD are prohibited unless the discharge is 4 months or less in duration.

## V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

### A. Effluent Limitations – Applicable to All Dewatering and Other Low Threat Discharges

#### 1. Final Effluent Limitations

- a. The discharge of pollutants from dewatering and other low threat discharges shall not exceed the following effluent limitations:

**Table 3. Effluent Limitations**

| Parameter                                | Units | Effluent Limitations |                |               |
|--|-------|----------------------|----------------|---------------|
|  |       | Average Monthly      | Weekly Average | Maximum Daily |
| Biochemical Oxygen Demand (5-day @ 20°C) | mg/L  | 10                   | 15             | 30            |
| Total Suspended Solids                   | mg/L  | 10                   | 15             | 30            |
| Settleable Solids                        | mL/L  | --                   | --             | 0.1           |

- b. **Total Residual Chlorine.** Effluent total residual chlorine shall not exceed:

- i. 0.011 mg/L, as a 4-day average; and
- ii. 0.019 mg/L, as a 1-hour average.

### B. Effluent Limitations – Applicable to Dewatering and Other Low Threat Discharges to Specific Waterbodies

#### 1. Final Effluent Limitations – Discharges within the Sacramento and San Joaquin River Basins (Except Goose Creek)

The pH of all dewatering and other low threat discharges within the Sacramento and San Joaquin River Basins (except Goose Creek) shall at all times be within the range of 6.5 and 8.5.

#### 2. Final Effluent Limitations – Discharges to Goose Creek

The pH of all dewatering and other low threat discharges to Goose Creek shall at all times be within the range of 7.5 and 9.5.

#### 3. Final Effluent Limitations – Discharges within the Tulare Lake Basin

The pH of all dewatering and other low threat discharges within the Tulare Lake Basin shall at all times be within the range of 6.5 and 8.3.

### C. Land Discharge Specifications

[Not Applicable]

### D. Reclamation Specifications

[Not Applicable]

## VI. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plans for the Sacramento and San Joaquin River Basin and the Tulare Lake Basin and are a required part of this Order. Compliance with any amendment or revision to the water quality objectives contained in the Basin Plans adopted by the Central Valley Water Board subsequent to adoption of this Order is also required. Any discharge authorized for coverage under this General Order shall not cause the following in the receiving water:

1. **Un-ionized Ammonia.** Un-ionized ammonia to be present in amounts that adversely affect beneficial uses or in excess of 0.025 mg/L (as N) in waterbodies in the Tulare Lake Basin.
2. **Bacteria.** The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, to exceed a geometric mean of 200 MPN/100 mL and no more than 10 percent of the total number of fecal coliform samples taken during any 30-day period to exceed 400 MPN/100 mL.
3. **Biostimulatory Substances.** Water to contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
4. **Chemical Constituents.** Chemical constituents to be present in concentrations that adversely affect beneficial uses.
5. **Color.** Discoloration that causes nuisance or adversely affects beneficial uses.
6. **Dissolved Oxygen.** For surface waters outside of the Delta for the Sacramento and San Joaquin River Basins and for the Tulare Lake Basin:
  - a. The monthly median of the mean daily dissolved oxygen concentration to fall below 85 percent of saturation in the main water mass; and
  - b. The 95 percentile dissolved oxygen concentration to fall below 75 percent of saturation; and
  - c. The dissolved oxygen concentration to be reduced below 5.0 mg/L at any time for water bodies designated WARM ; or
  - d. The dissolved oxygen concentration to be reduced below 7.0 mg/L at any time for water bodies designated COLD and/or SPWN.

Within the legal boundaries of the Delta, the dissolved oxygen concentrations shall not be reduced below: 7.0 mg/L in the Sacramento River (below the I Street Bridge) and in all Delta waters west of the Antioch Bridge; 6.0 mg/L in the San Joaquin River (between Turner Cut and Stockton, 1 September through 30 November); and 5.0 mg/L in all other Delta waters except those bodies of water which are constructed for



special purposes and from which fish have been excluded or where the fishery is not important as a beneficial use.

7. **Floating Material.** Floating material to be present in amounts that cause nuisance or adversely affect beneficial uses.
8. **Oil and Grease.** Oils, greases, waxes, or other materials to be present in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
9. **pH.** The pH to be depressed below 6.5 or raised above 8.5 for the Sacramento and San Joaquin River Basins (except Goose Creek). The pH to be depressed below 7.5 nor raised above 9.5 within Goose Creek. The pH to be depressed below 6.5, raised above 8.3, nor changed by more than 0.3 units for the Tulare Lake Basin.
10. **Pesticides:**
  - a. Pesticides to be present, individually or in combination, in concentrations that adversely affect beneficial uses;
  - b. Pesticides to be present in bottom sediments or aquatic life in concentrations that adversely affect beneficial uses;
  - c. Total identifiable persistent chlorinated hydrocarbon pesticides to be present in the water column at concentrations detectable within the accuracy of analytical methods approved by USEPA or the Executive Officer for the Sacramento and San Joaquin River Basins or prescribed in Standard Methods for the Examination of Water and Wastewater, 18th Edition, or other equivalent methods approved by the Executive Officer for the Tulare Lake Basin;
  - d. Pesticide concentrations to exceed those allowable by applicable antidegradation policies (see State Water Board Resolution No. 68-16 and 40 CFR 131.12.) for the Sacramento and San Joaquin River Basins;
  - e. Pesticide concentrations to exceed the lowest levels technically and economically achievable for the Sacramento and San Joaquin River Basins;
  - f. Pesticides to be present in concentrations in excess of the maximum contaminant levels (MCLs) set forth in CCR, Title 22, division 4, chapter 15 for the Sacramento and San Joaquin River Basins or as specified in Table 64444-A (Organic Chemicals) of section 64444 of Title 22 of the CCR for the Tulare Lake Basin; nor
  - g. Thiobencarb to be present in excess of 1.0 µg/L for the Sacramento and San Joaquin River Basins.

**11. Radioactivity:**

- a. Radionuclides to be present in concentrations that are harmful or deleterious to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

- b. Radionuclides to be present in excess of the MCLs specified in Table 4 (MCL Radioactivity) of Section 64443 of Title 22 of the California Code of Regulations.

**12. Suspended Sediments.** The suspended sediment load and suspended sediment discharge rate of surface waters to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

**13. Settleable Substances.** Substances to be present in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.

**14. Suspended Material.** Suspended material to be present in concentrations that cause nuisance or adversely affect beneficial uses.

**15. Taste and Odors.** Taste- or odor-producing substances to be present in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses or domestic or municipal water supplies.

**16. Temperature.** The natural temperature to be increased by more than 5°F.

**17. Total Dissolved Solids.** The total dissolved solids to exceed 1,000 mg/L.

**18. Toxicity.** Toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

**19. Turbidity.** Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

- a. For the Sacramento and San Joaquin River Basins, turbidity:

- i. Shall not exceed 2 Nephelometric Turbidity Units (NTU) where natural turbidity is less than 1 NTU;
- ii. Shall not increase more than 1 Nephelometric Turbidity Unit (NTU) where natural turbidity is between 1 and 5 NTUs.
- iii. Shall not increase more than 20 percent where natural turbidity is between 5 and 50 NTUs.
- iv. Shall not increase more than 10 NTU where natural turbidity is between 50 and 100 NTUs.
- v. Shall not increase more than 10 percent where natural turbidity is greater than 100 NTUs.

- b. For the Tulare Basin and the Sacramento and San Joaquin River Basins, turbidity shall not increase:

- i. More than 1 Nephelometric Turbidity Unit (NTU) where natural turbidity is between 0 and 5 NTUs.
- ii. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
- iii. More than 10 NTU where natural turbidity is between 50 and 100 NTUs.
- iv. More than 10 percent where natural turbidity is greater than 100 NTUs.

**B. Groundwater Limitations**

**[Not Applicable]**

## VII. PROVISIONS

### A. Standard Provisions

1. All Dischargers authorized to discharge under this General Order shall comply with all Standard Provisions (federal NPDES standard conditions from 40 CFR Part 122) included in Attachment D of this Order.
2. All Dischargers authorized to discharge under this General Order shall comply with the following provisions:
  - a. If a Discharger's wastewater treatment plant is publicly owned or subject to regulation by California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to Title 23, CCR, division 3, chapter 26.
  - b. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
    - i. violation of any term or condition contained in this Order;
    - ii. obtaining this Order by misrepresentation or by failing to disclose fully all relevant facts;
    - iii. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
    - iv. a material change in the character, location, or volume of discharge.

The causes for modification include:

- *New regulations.* New regulations have been promulgated under section 405(d) of the CWA, or the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.
- *Land application plans.* When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.
- *Change in sludge use or disposal practice.* Under 40 CFR 122.62(a)(1), a change in the Discharger's sludge use or disposal practice is a cause for modification of the permit. It is cause for revocation and reissuance if the Discharger requests or agrees.

The Central Valley Water Board may review and revise this Order at any time upon application of any affected person or the Central Valley Water Board's own motion.

- c. If a toxic effluent standard or prohibition (including any scheduled compliance specified in such effluent standard or prohibition) is established under section 307(a) of the CWA, or amendments thereto, for a toxic pollutant that is present in the discharge authorized herein, and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Central Valley Water Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition.

The Discharger shall comply with effluent standards and prohibitions within the time provided in the regulations that establish those standards or prohibitions, even if this Order has not yet been modified.

- d. This Order shall be modified, or alternately revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:
  - i. contains different conditions or is otherwise more stringent than any effluent limitation in the Order; or
  - ii. controls any pollutant limited in the Order.

The Order, as modified or reissued under this paragraph, shall also contain any other requirements of the CWA then applicable.

- e. The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
- f. The Discharger shall take all reasonable steps to minimize any adverse effects to waters of the State or users of those waters resulting from any discharge or sludge use or disposal in violation of this Order. Reasonable steps shall include such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge or sludge use or disposal.
- g. The discharge of any radiological, chemical or biological warfare agent or high-level, radiological waste is prohibited.
- h. A copy of this Order and the Notice of Applicability shall be maintained at the discharge facility and be available at all times to operating personnel. Key operating personnel shall be familiar with its content.
- i. Safeguard to electric power failure:
  - i. The Discharger shall provide safeguards to assure that, should there be reduction, loss, or failure of electric power, the discharge shall comply with the terms and conditions of this Order.
  - ii. Upon written request by the Central Valley Water Board a Discharger shall submit a written description of safeguards. Such safeguards may include

alternate power sources, standby generators, retention capacity, operating procedures, or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past 5 years on effluent quality and on the capability of the Discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Central Valley Water Board.

- iii. Should the treatment works not include safeguards against reduction, loss, or failure of electric power, or should the Central Valley Water Board not approve the existing safeguards, the Discharger shall, within 90 days of having been advised in writing by the Central Valley Water Board that the existing safeguards are inadequate, provide to the Central Valley Water Board and USEPA a schedule of compliance for providing safeguards such that in the event of reduction, loss, or failure of electric power, the Discharger shall comply with the terms and conditions of this Order. The schedule of compliance shall, upon approval of the Central Valley Water Board, become a condition of this Order.
- j. A Discharger, upon written request of the Central Valley Water Board, shall file with the Board a technical report on its preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. This report may be combined with that required under Central Valley Water Board Standard Provision contained in section VII.A.2.k. of this Order.

The technical report shall:

- i. Identify the possible sources of spills, leaks, untreated waste by-pass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
- ii. Evaluate the effectiveness of present facilities and procedures and state when they became operational.
- iii. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational.

The Central Valley Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions shall be incorporated as part of the Notice of Applicability, upon notice to the Discharger.

- k. The Discharger shall submit technical reports as directed by the Executive Officer. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper

application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1. To demonstrate compliance with Title 16, CCR, sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

- I. The Central Valley Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387.
- m. In the event a Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily effluent limitation, 1-hour average effluent limitation, or receiving water limitation contained in this Order, the Discharger shall notify the Central Valley Water Board by telephone (916) 464-3291 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within 5 days, unless the Central Valley Water Board waives confirmation. The written notification shall include the information required by the Standard Provision contained in Attachment D section V.E.1. [40 CFR 122.41(l)(6)(i)].
- n. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

## **B. Monitoring and Reporting Program Requirements**

Each Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment E of this Order as specified in the Notice of Applicability from the Executive Officer.

## **C. Special Provisions**

### **1. Reopener Provisions**

- a. This Order may be reopened for modification, or revocation and reissuance in accordance with the provisions contained in 40 CFR 122.62.
- b. Conditions that necessitate a major modification of a permit are described in 40 CFR 122.62, including:

- i. If new or amended applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, this permit may be reopened and modified in accordance with the new or amended standards.
- ii. When new information, that was not available at the time of permit issuance, would have justified different permit conditions at the time of issuance.
- c. **Total Residual Chlorine.** If a statewide policy for total residual chlorine is adopted during the term of this Order, this Order may be reopened and modified to maintain consistency with the statewide policy.

## **2. Special Studies, Technical Reports, and Additional Monitoring Requirements**

- a. **Pollution Prevention and Monitoring and Reporting Plan (PPMRP).** Water suppliers enrolling under this General Order that have or propose to have numerous discharge points shall prepare and implement a PPMRP in lieu of the specific Effluent Monitoring Requirements and Receiving Water Monitoring Requirements contained in sections IV and VIII of the Monitoring and Reporting Program (Attachment E). The PPMRP must be submitted with the Notice of Intent and is subject to approval by the Executive Officer. The PPMRP shall include, at a minimum, the elements identified in Attachment H and shall be prepared and implemented in accordance with the General Monitoring Provisions, Other Monitoring Requirements, and Reporting Requirements contained in sections I, IX, and X, respectively, of the Monitoring and Reporting Program (Attachment E).

## **3. Best Management Practices and Pollution Prevention**

- a. **Salinity.** Each Discharger authorized to discharge under this General Order shall utilize practices to minimize discharges of salinity.

## **4. Construction, Operation and Maintenance Specifications**

**[Not Applicable]**

## **5. Special Provisions for Municipal Facilities (POTWs Only)**

**[Not Applicable]**

## **6. Other Special Provisions**

- a. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this General Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.

To assume operation under this General Order, the succeeding owner or



operator must submit a Notice of Intent to the Executive Officer requesting coverage under this General Order and must receive a Notice of Applicability from the Executive Officer.

- b. Collected screenings and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Chapter 15, Division 3, Title 23 of the CCR and approved by the Executive Officer.

Any proposed change in solids use or disposal practice shall be reported to the Executive Officer and USEPA Regional Administrator at least 90 days in advance of the change.

## 7. Compliance Schedules

[Not Applicable]

## VIII. COMPLIANCE DETERMINATION

- A. **Total Residual Chlorine Effluent Limitations.** Monitoring for chlorine residual or for dechlorination agent residual in the effluent are appropriate methods for compliance determination with the total residual chlorine effluent limitations. A positive dechlorination agent residual in the effluent indicates that chlorine is not present in the discharge and demonstrates compliance with the total residual chlorine effluent limitations. This type of monitoring may also be used to prove that measured total residual chlorine concentrations are false positives. For Dischargers that dechlorinate, field monitoring data showing either a positive dechlorination agent residual or a chlorine residual concentration at or below the prescribed effluent limit is sufficient to show compliance with the total residual chlorine effluent limitations, as long as the monitoring instruments are maintained and calibrated in accordance with the manufacturer's recommendations.

Any quantifiable excursion above the 1-hour average or 4-day average total residual chlorine effluent limitations is a violation. "Quantifiable" means any excursion greater than or equal to a reporting level of 0.08 mg/L, or any more stringent reporting level included in a final statewide policy or standard for total residual chlorine.

If the Discharger conducts continuous monitoring and the Discharger can demonstrate, through data collected from a back-up monitoring system and submitted in its monitoring reports, that a chlorine spike recorded by the continuous monitor was not actually due to chlorine, then any excursion resulting from the recorded spikes may not be considered an exceedance, but rather reported as a false positive.

## **ATTACHMENT A – DEFINITIONS**

### **Arithmetic Mean ( $\mu$ )**

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean =  $\mu = \Sigma x / n$       where:  $\Sigma x$  is the sum of the measured ambient water concentrations, and  $n$  is the number of samples.

### **Average Monthly Effluent Limitation (AMEL)**

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

### **Average Weekly Effluent Limitation (AWEL)**

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

### **Bioaccumulative**

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

### **Carcinogenic**

Pollutants are substances that are known to cause cancer in living organisms.

### **Coefficient of Variation (CV)**

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

### **Daily Discharge**

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of 1 day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

### **Detected, but Not Quantified (DNQ)**

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

### **Effluent Concentration Allowance (ECA)**

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

### **Enclosed Bays**

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

### **Estimated Chemical Concentration**

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

### **Estuaries**

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in CWC section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

### **Inland Surface Waters**

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

### **Instantaneous Maximum Effluent Limitation**

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

### **Instantaneous Minimum Effluent Limitation**

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

### **Maximum Daily Effluent Limitation (MDEL)**

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

### **Median**

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

### **Method Detection Limit (MDL)**

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR Part 136, Attachment B, revised as of 3 July 1999.

### **Minimum Level (ML)**

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

### **Not Detected (ND)**

Sample results which are less than the laboratory's MDL.

### **Persistent Pollutants**

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

### **Pollution Prevention**

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Central Valley Water Board.

### **Reporting Level (RL)**

The RL is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the RL depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied in the computation of the RL.

### **Source of Drinking Water**

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

### **Standard Deviation ( $\sigma$ )**

Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

$\mu$  is the arithmetic mean of the observed values; and

n is the number of samples.

**ATTACHMENT B – SCREENING REQUIREMENTS FOR ALL DISCHARGES<sup>a</sup>**

- I. Dischargers seeking authorization to discharge under this General Order shall sample and analyze the effluent for the constituents contained in Table B-1. The results of the analyses shall be compared to the corresponding screening level and shall be submitted as part of the Notice of Intent.

**Table B-1. Screening Levels for Priority Pollutants**

| Priority Pollutant <sup>1</sup> | Units | Screening Level<br>(Most Stringent<br>Objective/Criterion) | Most Stringent Objective/Criteria |                            |                          |
|---------------------------------|-------|--|-----------------------------------|----------------------------|--------------------------|
|                                 |       |  | Human<br>Health                   | Chronic<br>Aquatic<br>Life | Acute<br>Aquatic<br>Life |
| Antimony, Total Recoverable     | µg/L  | 6  | 6                                 | --                         | --                       |
| Arsenic, Total Recoverable      | µg/L  | 10   | 10                                | 150                        | 340                      |
| Beryllium, Total Recoverable    | µg/L  | 4  | 4                                 | --                         | --                       |
| Chromium (VI)                   | µg/L  | 11   | 100                               | 11                         | 16                       |
| Mercury, Total Recoverable      | µg/L  | 0.05   | 0.05                              | 0.77                       | 1.4                      |
| Selenium, Total Recoverable     | µg/L  | 5.0  | 20                                | 5.0                        | 20                       |
| Thallium, Total Recoverable     | µg/L  | 1.7  | 1.7                               | 40                         | 1,400                    |
| Cyanide, Total (as CN)          | µg/L  | 5.2  | 150                               | 5.2                        | 22                       |
| Asbestos                        | MFL   | 7  | 7                                 | --                         | --                       |
| 2,3,7,8-TCDD (Dioxin)           | µg/L  | 1.3E-08  | 1.3E-08                           | 0.00001                    | 0.01                     |
| Acrolein                        | µg/L  | 320  | 320                               | --                         | --                       |
| Acrylonitrile                   | µg/L  | 0.059  | 0.059                             | --                         | 7,550                    |
| Benzene                         | µg/L  | 1  | 1                                 | --                         | --                       |
| Bromoform                       | µg/L  | 4.3  | 4.3                               | --                         | --                       |
| Carbon Tetrachloride            | µg/L  | 0.25   | 0.25                              | --                         | --                       |
| Chlorobenzene                   | µg/L  | 70   | 70                                | --                         | --                       |
| Chlorodibromomethane            | µg/L  | 0.401  | 0.401                             | --                         | --                       |
| Chloroethane                    | µg/L  | --   | --                                | --                         | --                       |
| 2-Chloroethylvinyl Ether        | µg/L  | --   | --                                | --                         | --                       |
| Chloroform                      | µg/L  | 80   | 80                                | 1,240                      | --                       |
| Dichlorobromomethane            | µg/L  | 0.56   | 0.56                              | --                         | --                       |
| 1,1-Dichloroethane              | µg/L  | 5  | 5                                 | --                         | --                       |
| 1,2-Dichloroethane              | µg/L  | 0.38   | 0.38                              | 20,000                     | --                       |
| 1,1-Dichloroethylene            | µg/L  | 0.057  | 0.057                             | --                         | --                       |
| 1,2-Dichloropropane             | µg/L  | 0.52   | 0.52                              | 5,700                      | --                       |
| 1,3-Dichloropropylene           | µg/L  | 0.5  | 0.5                               | 244                        | 6,060                    |
| Ethylbenzene                    | µg/L  | 300  | 300                               | --                         | --                       |
| Methyl Bromide                  | µg/L  | 48   | 48                                | --                         | 11,000                   |
| Methyl Chloride                 | µg/L  | --   | --                                | --                         | --                       |
| Methylene Chloride              | µg/L  | 4.7  | 4.7                               | --                         | --                       |
| 1,1,2,2-Tetrachloroethane       | µg/L  | 0.17   | 0.17                              | 2,400                      | --                       |
| Tetrachloroethylene             | µg/L  | 0.8  | 0.8                               | 840                        | --                       |
| Toluene                         | µg/L  | 150  | 150                               | --                         | --                       |

<sup>a</sup> Dischargers applying for a categorical exception for meeting the priority pollutant criteria/objectives as authorized by section 5.3 of the SIP are not required to perform wastewater sampling for the priority pollutants contained in Tables B-1 or B-2. Dischargers of low volume discharges seeking an exception to the sampling requirements contained in Tables B-1 and B-2 must submit justification that the existing or proposed discharge will have no significant adverse impact on water quality.

| Priority Pollutant <sup>1</sup> | Units | Screening Level<br>(Most Stringent<br>Objective/Criterion) | Most Stringent Objective/Criteria |                            |                          |
|---------------------------------|-------|--|-----------------------------------|----------------------------|--------------------------|
|                                 |       |  | Human<br>Health                   | Chronic<br>Aquatic<br>Life | Acute<br>Aquatic<br>Life |
| 1,2-Trans-Dichloroethylene      | µg/L  | 10   | 10                                | --                         | --                       |
| 1,1,1-Trichloroethane           | µg/L  | 200  | 200                               | --                         | 18,000                   |
| 1,1,2-Trichloroethane           | µg/L  | 0.60   | 0.60                              | 9,400                      | --                       |
| Trichloroethylene               | µg/L  | 2.7  | 2.7                               | --                         | 45,000                   |
| Vinyl Chloride                  | µg/L  | 0.5  | 0.5                               | --                         | --                       |
| 2-Chlorophenol                  | µg/L  | 120  | 120                               | --                         | --                       |
| 2,4-Dichlorophenol              | µg/L  | 93   | 93                                | --                         | --                       |
| 2,4-Dimethylphenol              | µg/L  | 540  | 540                               | --                         | --                       |
| 2-Methyl-4,6-Dinitrophenol      | µg/L  | 13.4   | 13.4                              | --                         | 230                      |
| 2,4-Dinitrophenol               | µg/L  | 70   | 70                                | --                         | 230                      |
| 2-Nitrophenol                   | µg/L  | --   | --                                | --                         | --                       |
| 4-Nitrophenol                   | µg/L  | --   | --                                | --                         | --                       |
| 3-Methyl-4-Chlorophenol         | µg/L  | --   | --                                | --                         | --                       |
| Pentachlorophenol               | µg/L  | 0.28   | 0.28                              | 23                         | 30                       |
| Phenol                          | µg/L  | 21,000   | 21,000                            | --                         | --                       |
| 2,4,6-Trichlorophenol           | µg/L  | 2.1  | 2.1                               | --                         | --                       |
| Acenaphthene                    | µg/L  | 1,200  | 1,200                             | --                         | --                       |
| Acenaphthylene                  | µg/L  | --   | --                                | --                         | --                       |
| Anthracene                      | µg/L  | 9,600  | 9,600                             | --                         | --                       |
| Benzidine                       | µg/L  | 0.00012  | 0.00012                           | --                         | 2,500                    |
| Benzo(a)Anthracene              | µg/L  | 0.0044   | 0.0044                            | --                         | --                       |
| Benzo(a)Pyrene                  | µg/L  | 0.0044   | 0.0044                            | --                         | --                       |
| Benzo(b)Fluoranthene            | µg/L  | 0.0044   | 0.0044                            | --                         | --                       |
| Benzo(ghi)Perylene              | µg/L  | --   | --                                | --                         | --                       |
| Benzo(k)Fluoranthene            | µg/L  | 0.0044   | 0.0044                            | --                         | --                       |
| Bis(2-Chloroethoxy)Methane      | µg/L  | --   | --                                | --                         | --                       |
| Bis(2-Chloroethyl)Ether         | µg/L  | 0.031  | 0.031                             | 122                        | 238,000                  |
| Bis(2-Chloroisopropyl)Ether     | µg/L  | 1,400  | 1,400                             | --                         | --                       |
| Bis(2-Ethylhexyl)Phthalate      | µg/L  | 1.8  | 1.8                               | --                         | --                       |
| 4-Bromophenyl Phenyl Ether      | µg/L  | --   | --                                | --                         | --                       |
| Butylbenzyl Phthalate           | µg/L  | 3,000  | 3,000                             | --                         | --                       |
| 2-Chloronaphthalene             | µg/L  | 1,700  | 1,700                             | --                         | --                       |
| 4-Chlorophenyl Phenyl Ether     | µg/L  | --   | --                                | --                         | --                       |
| Chrysene                        | µg/L  | 0.0044   | 0.0044                            | --                         | --                       |
| Dibenzo(a,h)Anthracene          | µg/L  | 0.0044   | 0.0044                            | --                         | --                       |
| 1,2-Dichlorobenzene             | µg/L  | 600  | 600                               | 763                        | --                       |
| 1,3-Dichlorobenzene             | µg/L  | 400  | 400                               | 763                        | --                       |
| 1,4-Dichlorobenzene             | µg/L  | 5  | 5                                 | 763                        | --                       |
| 3,3-Dichlorobenzidine           | µg/L  | 0.04   | 0.04                              | --                         | --                       |
| Diethyl Phthalate               | µg/L  | 23,000   | 23,000                            | --                         | --                       |
| Dimethyl Phthalate              | µg/L  | 313,000  | 313,000                           | --                         | --                       |
| Di-n-Butyl Phthalate            | µg/L  | 2,700  | 2,700                             | --                         | --                       |
| 2,4-Dinitrotoluene              | µg/L  | 0.11   | 0.11                              | 230                        | 330                      |
| 2,6-Dinitrotoluene              | µg/L  | --   | --                                | --                         | --                       |
| Di-n-Octyl Phthalate            | µg/L  | --   | --                                | --                         | --                       |
| 1,2-Diphenylhydrazine           | µg/L  | 0.040  | 0.040                             | --                         | 270                      |
| Fluoranthene                    | µg/L  | 300  | 300                               | --                         | --                       |
| Fluorene                        | µg/L  | 1,300  | 1,300                             | --                         | --                       |
| Hexachlorobenzene               | µg/L  | 0.00075  | 0.00075                           | --                         | 250                      |

| Priority Pollutant <sup>1</sup> | Units | Screening Level<br>(Most Stringent<br>Objective/Criterion) | Most Stringent Objective/Criteria |                            |                          |
|---------------------------------|-------|--|-----------------------------------|----------------------------|--------------------------|
|                                 |       |  | Human<br>Health                   | Chronic<br>Aquatic<br>Life | Acute<br>Aquatic<br>Life |
| Hexachlorobutadiene             | µg/L  | 0.44   | 0.44                              | 9.3                        | 90                       |
| Hexachlorocyclopentadiene       | µg/L  | 50   | 50                                | --                         | --                       |
| Hexachloroethane                | µg/L  | 1.9  | 1.9                               | 540                        | 980                      |
| Indeno(1,2,3-cd) Pyrene         | µg/L  | 0.0044   | 0.0044                            | --                         | --                       |
| Isophorone                      | µg/L  | 8.4  | 8.4                               | --                         | 117,000                  |
| Naphthalene                     | µg/L  | --   | --                                | --                         | --                       |
| Nitrobenzene                    | µg/L  | 17   | 17                                | --                         | 27,000                   |
| N-Nitrosodimethylamine          | µg/L  | 0.00069  | 0.00069                           | --                         | --                       |
| N-Nitrosodi-n-Propylamine       | µg/L  | 0.005  | 0.005                             | --                         | 5,850                    |
| N-Nitrosodiphenylamine          | µg/L  | 5.0  | 5.0                               | --                         | 5,850                    |
| Phenanthrene                    | µg/L  | --   | --                                | --                         | --                       |
| Pyrene                          | µg/L  | 960  | 960                               | --                         | --                       |
| 1,2,4-Trichlorobenzene          | µg/L  | 5  | 5                                 | 250                        | 50                       |
| Aldrin                          | µg/L  | 0.00013  | 0.00013                           | --                         | 3                        |
| alpha-BHC                       | µg/L  | 0.0039   | 0.0039                            | --                         | --                       |
| beta-BHC                        | µg/L  | 0.014  | 0.014                             | --                         | --                       |
| gamma-BHC                       | µg/L  | 0.019  | 0.019                             | 0.08                       | 0.95                     |
| delta-BHC                       | µg/L  | --   | --                                | --                         | --                       |
| Chlordane                       | µg/L  | 0.00057  | 0.00057                           | 0.0043                     | 2.4                      |
| 4,4-DDT                         | µg/L  | 0.00059  | 0.00059                           | 0.001                      | 1.1                      |
| 4,4-DDE                         | µg/L  | 0.00059  | 0.00059                           | --                         | --                       |
| 4,4-DDD                         | µg/L  | 0.00083  | 0.00083                           | --                         | --                       |
| Dieldrin                        | µg/L  | 0.00014  | 0.00014                           | 0.056                      | 0.24                     |
| alpha-Endosulfan                | µg/L  | 0.056  | 42                                | 0.056                      | 0.22                     |
| beta-Endosulfan                 | µg/L  | 0.056  | 110                               | 0.056                      | 0.22                     |
| Endosulfan Sulfate              | µg/L  | 110  | 110                               | --                         | --                       |
| Endrin                          | µg/L  | 0.036  | 0.76                              | 0.036                      | 0.086                    |
| Endrin Aldehyde                 | µg/L  | 0.76   | 0.76                              | --                         | --                       |
| Heptachlor                      | µg/L  | 0.00021  | 0.00021                           | 0.0038                     | 0.52                     |
| Heptachlor Epoxide              | µg/L  | 0.00010  | 0.00010                           | 0.0038                     | 0.52                     |
| PCBs sum <sup>2</sup>           | µg/L  | 0.00017  | 0.00017                           | 0.014                      | --                       |
| Toxaphene                       | µg/L  | 0.0002   | 0.00073                           | 0.0002                     | 0.73                     |

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 and in accordance with the General Monitoring Provisions contained in section I of the Monitoring and Reporting Program (Attachment E).

<sup>2</sup> This objective applies to the sum of PCB Aroclors 1242, 1254, 1221, 1232, 1248, 1280, and 1016.

- II. Dischargers seeking authorization to discharge under this General Order shall sample and analyze the effluent for the constituents contained in Table B-2. The results of the analyses shall be compared to the corresponding screening level and shall be submitted as part of the Notice of Intent. The screening levels contained in Table B-2 are based on hardness<sup>a</sup>. For waters with lowest observed hardness concentrations less than 50 mg/L, screening levels shall be based on a hardness value of 25 mg/L. For waters with lowest observed hardness concentrations greater than or equal to 50 mg/L, but less than 100 mg/L, screening levels shall be based on a hardness value of 75 mg/L. For waters with lowest observed hardness concentrations greater than or equal to 100 mg/L, but less than 200 mg/L, screening levels shall be based on a hardness value of 150 mg/L. For waters

<sup>a</sup> All hardness values are in mg/L as CaCO<sub>3</sub>



with lowest observed hardness concentrations greater than or equal to 200 mg/L, screening levels shall be based on a hardness value of 200 mg/L.

**Table B-2. Screening Levels for Hardness-Dependent Metals**

| Parameter <sup>1</sup>     | Units | Hardness in mg/L (H) |                 |                 |                 |
|----------------------------|-------|----------------------|-----------------|-----------------|-----------------|
|                            |       | H <50                | 50 ≤ H <100     | 100 ≤ H <200    | H ≥200          |
|                            |       | Screening Level      | Screening Level | Screening Level | Screening Level |
| Cadmium, Total Recoverable | µg/L  | 0.83                 | 1.96            | 3.4             | 4.24            |
| Chromium (III)             | µg/L  | 67                   | 164             | 288             | 365             |
| Copper, Total Recoverable  | µg/L  | 2.85                 | 7.3             | 13.2            | 16.9            |
| Lead, Total Recoverable    | µg/L  | 0.54                 | 2.2             | 5.3             | 7.7             |
| Nickel, Total Recoverable  | µg/L  | 16.1                 | 40.9            | 73.5            | 93.8            |
| Silver, Total Recoverable  | µg/L  | 0.37                 | 2.47            | 8.15            | 13.4            |
| Zinc, Total Recoverable    | µg/L  | 37                   | 93.9            | 168.9           | 215.6           |

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 and in accordance with the General Monitoring Provisions contained in section I of the Monitoring and Reporting Program (Attachment E).

## ATTACHMENT C – SCREENING REQUIREMENTS FOR DISCHARGES TO SPECIFIC WATERBODIES

- I. In addition to the analyses required in Attachment B, dischargers seeking authorization to discharge under this General Order to the Sacramento River from Keswick Dam to the I Street Bridge at the City of Sacramento, American River from Folsom Dam to the Sacramento River, Folsom Lake, or the Sacramento-San Joaquin Delta shall sample and analyze the effluent for the constituents contained in Table C-1. The screening levels contained in Table C-1 for arsenic, copper, silver, and zinc supercede those contained in Attachment B for the same parameters. The results of the analyses shall be compared to the corresponding screening level and shall be submitted as part of the Notice of Intent.

**Table C-1. Screening Levels for Discharges to the Sacramento River from Keswick Dam to the I Street Bridge at City of Sacramento, American River from Folsom Dam to the Sacramento River, Folsom Lake, and the Sacramento-San Joaquin Delta**

| Parameter <sup>1</sup>     | Units | Screening Level   |
|----------------------------|-------|-------------------|
| Arsenic, Total Recoverable | mg/L  | 0.01              |
| Copper, Total Recoverable  | mg/L  | 0.01 <sup>2</sup> |
| Silver, Total Recoverable  | mg/L  | 0.01              |
| Zinc, Total Recoverable    | mg/L  | 0.1 <sup>2</sup>  |

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 and in accordance with the General Monitoring Provisions contained in section I of the Monitoring and Reporting Program (Attachment E).

<sup>2</sup> Does not apply to Sacramento River above the State Highway 32 Bridge at Hamilton City.

- II. In addition to the analyses required in Attachment B, dischargers seeking authorization to discharge under this General Order to the Sacramento River and its tributaries above the State Highway 32 Bridge at Hamilton City shall sample and analyze the effluent for the constituents contained in Table C-2. The screening levels contained in Table C-2 for copper, zinc, and cadmium supercede those contained in Attachment B for the same parameters. The results of the analyses shall be compared to the corresponding screening level and shall be submitted as part of the Notice of Intent. The screening levels contained in Table C-2 are based on hardness. For waters with lowest observed hardness concentrations less than 50 mg/L, screening levels shall be based on a hardness value of 25 mg/L. For waters with lowest observed hardness concentrations greater than or equal to 50 mg/L, but less than 100 mg/L, screening levels shall be based on a hardness value of 75 mg/L. For waters with lowest observed hardness concentrations greater than or equal to 100 mg/L, but less than 200 mg/L, screening levels shall be based on a hardness value of 150 mg/L. For waters with lowest observed hardness concentrations greater than or equal to 200 mg/L, screening levels shall be based on a hardness value of 200 mg/L.

**Table C-2. Screening Levels for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City**

| Parameter <sup>1</sup>     | Units | Hardness in mg/L (H)        |                                   |                                    |                              |
|----------------------------|-------|-----------------------------|-----------------------------------|------------------------------------|------------------------------|
|                            |       | H <50<br>Screening<br>Level | 50 ≤ H <100<br>Screening<br>Level | 100 ≤ H <200<br>Screening<br>Level | H ≥200<br>Screening<br>Level |
| Copper, Total Recoverable  | µg/L  | 3.8                         | 10.0                              | 19.4                               | 25.0                         |
| Zinc, Total Recoverable    | µg/L  | 11.0                        | 28.0                              | 49.0                               | 62.0                         |
| Cadmium, Total Recoverable | µg/L  | 0.13                        | 0.49                              | 1.0                                | 1.6                          |

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 and in accordance with the General Monitoring Provisions contained in section I of the Monitoring and Reporting Program (Attachment E).

III. In addition to the analyses required in Attachment B, dischargers seeking authorization to discharge under this General Order within the Sacramento and San Joaquin River Basins and waters designated COLD in the Tulare Lake Basin shall sample and analyze the effluent for the constituents contained in Table C-3. The screening level contained in Table C-3 for persistent chlorinated hydrocarbon pesticides supercedes those contained in Attachment B for the same parameters. The results of the analyses shall be compared to the corresponding screening level and shall be submitted as part of the Notice of Intent.

**Table C-3. Screening Levels for Discharges Within the Sacramento and San Joaquin River Basins and Waters Designated as COLD in the Tulare Lake Basin**

| Parameter <sup>1</sup>                        | Units | Screening Level |
|---|-------|-----------------|
| Persistent Chlorinated Hydrocarbon Pesticides | µg/L  | ND <sup>2</sup> |

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 and in accordance with the General Monitoring Provisions contained in section I of the Monitoring and Reporting Program (Attachment E).

<sup>2</sup> The non-detectable (ND) screening level applies to each individual pesticide. No individual pesticide may be present in the discharge at detectable concentrations. The Discharger shall use USEPA standard analytical techniques with a maximum acceptable detection level of 0.05 µg/L. Persistent chlorinated hydrocarbon pesticides include aldrin, dieldrin, chlordane, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, hexachlorocyclohexane (alpha-BHC, beta-BHC, delta-BHC, and gamma-BHC or lindane), endosulfan (alpha and beta), endosulfan sulfate, toxaphene, 4,4'DDD, 4,4'DDE, and 4,4'DDT.

## **ATTACHMENT D – STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR 122.41(a)(1).)

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR 122.41(c).)

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d).)

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR 122.41(e).)

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR 122.5(c).)

## **F. Inspection and Entry**

The Discharger shall allow the Central Valley Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 CFR 122.41(i); CWC section 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 CFR 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location. (40 CFR 122.41(i)(4).)

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i).)
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Central Valley Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR 122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR 122.41(m)(4)(i)(A));
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR 122.41(m)(4)(i)(B)); and
  - c. The Discharger submitted notice to the Central Valley Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR 122.41(m)(4)(i)(C).)
4. The Central Valley Water Board may approve an anticipated bypass, after considering its adverse effects, if the Central Valley Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR 122.41(m)(4)(ii).)
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR 122.41(m)(3)(i).)
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR 122.41(m)(3)(ii).)

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 CFR 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was

caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR 122.41(n)(3)(i));
  - b. The permitted facility was, at the time, being properly operated (40 CFR 122.41(n)(3)(ii));
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR 122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR 122.41(n)(4).)

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR 122.41(f).)

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 CFR 122.41(b).)

### **C. Transfers**

This Order is not transferable to any person except after notice to the Central Valley Water Board. The Central Valley Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC. (40 CFR 122.41(l)(3) and 122.61.)

### **III. STANDARD PROVISIONS – MONITORING**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR 122.41(j)(1).)
- B.** Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order. (40 CFR 122.41(j)(4) and 122.44(i)(1)(iv).)

### **IV. STANDARD PROVISIONS – RECORDS**

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least 5 years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Central Valley Water Board Executive Officer at any time. (40 CFR 122.41(j)(2).)
- B. Records of monitoring information shall include:**
  - 1. The date, exact place, and time of sampling or measurements (40 CFR 122.41(j)(3)(i));
  - 2. The individual(s) who performed the sampling or measurements (40 CFR 122.41(j)(3)(ii));
  - 3. The date(s) analyses were performed (40 CFR 122.41(j)(3)(iii));
  - 4. The individual(s) who performed the analyses (40 CFR 122.41(j)(3)(iv));
  - 5. The analytical techniques or methods used (40 CFR 122.41(j)(3)(v)); and
  - 6. The results of such analyses. (40 CFR 122.41(j)(3)(vi).)
- C. Claims of confidentiality for the following information will be denied (40 CFR 122.7(b)):**
  - 1. The name and address of any permit applicant or Discharger (40 CFR 122.7(b)(1)); and
  - 2. Permit applications and attachments, permits and effluent data. (40 CFR 122.7(b)(2).)



## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Central Valley Water Board, State Water Board, or USEPA within a reasonable time, any information which the Central Valley Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Central Valley Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR 122.41(h); Wat. Code, § 13267.)

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Central Valley Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, V.B.6, and V.B.7 below. (40 CFR 122.41(k).)
2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 CFR 122.22(a)(1).)
3. For a partnership or sole proprietorship, all permit applications shall be signed by a general partner or the proprietor, respectively. (40 CFR 122.22(a)(2).)
4. For a municipality, State, federal, or other public agency, all permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR 122.22(a)(3).)
5. All reports required by this Order and other information requested by the Central Valley Water Board, State Water Board, or USEPA shall be signed by a person

described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR 122.22(b)(1));
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR 122.22(b)(2)); and
  - c. The written authorization is submitted to the Central Valley Water Board and State Water Board. (40 CFR 122.22(b)(3).)
6. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Central Valley Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR 122.22(c).)
7. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 CFR 122.22(d).)

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR 122.22(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Central Valley Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use

or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Central Valley Water Board.  
(40 CFR 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.  
(40 CFR 122.41(l)(4)(iii).)

#### **D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 CFR 122.41(l)(5).)

#### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR 122.41(l)(6)(ii)):
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order.  
(40 CFR 122.41(l)(6)(ii)(A).)
  - b. Any upset that exceeds any effluent limitation in this Order.  
(40 CFR 122.41(l)(6)(ii)(B).)
3. The Central Valley Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR 122.41(l)(6)(iii).)

#### **F. Planned Changes**

The Discharger shall give notice to the Central Valley Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b) (40 CFR 122.41(l)(1)(i)); or
2. If the discharge is not an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 CFR 122.42(a), the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR 122.41(l)(1)(ii).)

The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 CFR 122.41(l)(1)(ii).)

3. If the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge, the alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii).)

#### **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Central Valley Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR 122.41(l)(2).)

#### **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR 122.41(l)(7).)

#### **I. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Central Valley Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR 122.41(l)(8).)

## **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A.** The Central Valley Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387

## **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

### **A. Non-Municipal Facilities**

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Central Valley Water Board as soon as they know or have reason to believe (40 CFR 122.42(a)):

- 1.** That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR 122.42(a)(1)):
  - a.** 100 micrograms per liter ( $\mu\text{g/L}$ ) (40 CFR 122.42(a)(1)(i));
  - b.** 200  $\mu\text{g/L}$  for acrolein and acrylonitrile; 500  $\mu\text{g/L}$  for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter ( $\text{mg/L}$ ) for antimony (40 CFR 122.42(a)(1)(ii));
  - c.** Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR 122.42(a)(1)(iii)); or
  - d.** The level established by the Central Valley Water Board in accordance with 40 CFR 122.44(f). (40 CFR 122.42(a)(1)(iv).)
- 2.** That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR 122.42(a)(2)):
  - a.** 500 micrograms per liter ( $\mu\text{g/L}$ ) (40 CFR 122.42(a)(2)(i));
  - b.** 1 milligram per liter ( $\text{mg/L}$ ) for antimony (40 CFR 122.42(a)(2)(ii));
  - c.** Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR 122.42(a)(2)(iii)); or
  - d.** The level established by the Central Valley Water Board in accordance with section 122.44(f). (40 CFR 122.42(a)(2)(iv).)

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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## **ATTACHMENT E – MONITORING AND REPORTING PROGRAM**

Title 40 of the Code of Federal Regulations (CFR), Part 122.48 (40 CFR 122.48) requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code (CWC) sections 13267 and 13383 also authorize the Central Valley Regional Water Quality Control Board (Central Valley Water Board) to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements, which implement the federal and California regulations.

### **I. GENERAL MONITORING PROVISIONS**

- A.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of this Central Valley Water Board.
- B.** Effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to mixing with the receiving waters. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.
- C.** Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the Department of Public Health (DPH; formerly the Department of Health Services). In the event a certified laboratory is not available to the Discharger, analyses performed by a non-certified laboratory will be accepted provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program must be kept in the laboratory and shall be available for inspection by Central Valley Water Board staff. The Quality Assurance-Quality Control Program must conform to USEPA guidelines or to procedures approved by the Central Valley Water Board.
- D.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- E.** Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.

- F.** Laboratories analyzing monitoring samples shall be certified by DPH, in accordance with the provision of CWC section 13176, and must include quality assurance/quality control data with their reports.
- G.** Dischargers shall file with the Central Valley Water Board technical reports on self-monitoring performed according to the detailed specifications contained in this Monitoring and Reporting Program.
- H.** The results of all monitoring required by this Order shall be reported to the Central Valley Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order.



## II. MONITORING LOCATIONS

Each Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

**Table E-1. Monitoring Station Locations**

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description   |
|----------------------|--------------------------|---|
| 001 <sup>1</sup>     | EFF-001                  | A location where a representative sample of the effluent can be collected prior to discharging to surface water.                |
| --                   | RSW-001                  | The receiving water, approximately 50 feet upstream from the point of discharge or as defined in the Notice of Applicability.   |
| --                   | RSW-002                  | The receiving water, approximately 50 feet downstream from the point of discharge or as defined in the Notice of Applicability. |

<sup>1</sup> Dischargers enrolled under this General Order for more than one discharge point must comply with effluent limitations and monitoring requirements at each discharge point.

## III. INFLUENT MONITORING REQUIREMENTS

[Not Applicable]

## IV. EFFLUENT MONITORING REQUIREMENTS

### A. Monitoring Location EFF-001

1. For discharges having a duration greater than 4 months, the Discharger shall monitor the dewatering or low threat wastewater at EFF-001 as follows:

**Table E-2. Effluent Monitoring – Discharges Greater than 4 Months in Duration**

| Parameter                                | Units          | Sample Type | Minimum Sampling Frequency <sup>1</sup> | Required Analytical Test Method |
|--|----------------|-------------|---|---------------------------------|
| Biochemical Oxygen Demand (5-day @ 20°C) | mg/L           | Grab        | 1/Quarter                               | <sup>2</sup>                    |
| Chlorine, Total Residual                 | mg/L           | Grab        | 1/Quarter                               | <sup>2,3,4</sup>                |
| Electrical Conductivity @ 25°C           | µmhos/cm       | Grab        | 1/Quarter                               | <sup>2</sup>                    |
| Flow                                     | MGD            | Meter       | Continuous                              | <sup>2</sup>                    |
| pH                                       | standard units | Grab        | 1/Month                                 | <sup>2</sup>                    |
| Settleable Solids                        | mL/L           | Grab        | 1/Quarter                               | <sup>2</sup>                    |
| Total Suspended Solids                   | mg/L           | Grab        | 1/Quarter                               | <sup>2</sup>                    |
| Temperature                              | °F             | Grab        | 1/Month                                 | <sup>2</sup>                    |

<sup>1</sup> If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record data for all of the constituents listed above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the table.

- <sup>2</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136.
- <sup>3</sup> A handheld field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- <sup>4</sup> Total chlorine residual must be monitored with a method sensitive to and accurate at a reporting level of 0.08 mg/L, or any more stringent reporting level included in a final statewide policy or standard for total residual chlorine.

2. For discharges having a duration less than 4 months, the Discharger shall monitor the dewatering or low threat wastewater at EFF-001 as follows:

**Table E-3. Effluent Monitoring – Discharges Less than 4 Months in Duration**

| Parameter                                | Units          | Sample Type | Minimum Sampling Frequency <sup>1,2</sup> | Required Analytical Test Method |
|--|----------------|-------------|---|---------------------------------|
| Biochemical Oxygen Demand (5-day @ 20°C) | mg/L           | Grab        | 2/Month                                   | <sup>3</sup>                    |
| Chlorine, Total Residual                 | mg/L           | Grab        | 1/Discharge Event                         | <sup>3,4,5</sup>                |
| Electrical Conductivity @ 25°C           | µmhos/cm       | Grab        | 2/Month                                   | <sup>3</sup>                    |
| pH                                       | standard units | Grab        | 2/Month                                   | <sup>3</sup>                    |
| Settleable Solids                        | mL/L           | Grab        | 2/Month                                   | <sup>3</sup>                    |
| Total Suspended Solids                   | mg/L           | Grab        | 2/Month                                   | <sup>3</sup>                    |

<sup>1</sup> If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record data for all of the constituents listed above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the table.

<sup>2</sup> The first sample shall be collected at the start of discharge.

<sup>3</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136.

<sup>4</sup> A handheld field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

<sup>5</sup> Total chlorine residual must be monitored with a method sensitive to and accurate at a reporting level of 0.08 mg/L, or any more stringent reporting level included in a final statewide policy or standard for total residual chlorine.

## **V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS**

**[Not Applicable]**

## **VI. LAND DISCHARGE MONITORING REQUIREMENTS**

**[Not Applicable]**

## **VII. RECLAMATION MONITORING REQUIREMENTS**

**[Not Applicable]**

## VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

### A. Monitoring Locations RSW-001 and RSW-002

1. For discharges having a duration greater than 4 months, the Discharger shall monitor the receiving water at RSW-001 and RSW-002 as follows:

**Table E-4. Receiving Water Monitoring Requirements – Discharges Greater than 4 Months in Duration**

| Parameter                      | Units          | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|--------------------------------|----------------|-------------|----------------------------|---------------------------------|
| Dissolved Oxygen               | mg/L           | Grab        | 1/Month                    | 1                               |
| Electrical Conductivity @ 25°C | µmhos/cm       | Grab        | 1/Month                    | 1                               |
| pH                             | standard units | Grab        | 1/Month                    | 1                               |
| Temperature                    | °F             | Grab        | 1/Month                    | 1                               |
| Turbidity                      | NTU            | Grab        | 1/Month                    | 1                               |

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136.

2. For discharges having a duration less than 4 months, the Discharger shall monitor the receiving water at RSW-001 and RSW-002 as follows:

**Table E-5. Receiving Water Monitoring Requirements – Discharges Less than 4 Months in Duration**

| Parameter                      | Units          | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|--------------------------------|----------------|-------------|----------------------------|---------------------------------|
| Dissolved Oxygen               | mg/L           | Grab        | 2/Week                     | 1                               |
| Electrical Conductivity @ 25°C | µmhos/cm       | Grab        | 2/Week                     | 1                               |
| pH                             | standard units | Grab        | 2/Week                     | 1                               |
| Temperature                    | °F             | Grab        | 2/Week                     | 1                               |
| Turbidity                      | NTU            | Grab        | 2/Week                     | 1                               |

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136.

3. In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001 and RSW-002. Attention shall be given to the presence or absence of:
  - a. Floating or suspended matter;
  - b. Discoloration;
  - c. Bottom deposits;
  - d. Aquatic life;
  - e. Visible films, sheens, or coatings;
  - f. Fungi, slimes, or objectionable growths; and
  - g. Potential nuisance conditions.

Notes on receiving water conditions shall be summarized in the monitoring report.

## **IX. OTHER MONITORING REQUIREMENTS**

### **A. Post-Discharge Report**

A post-discharge report shall be submitted after each discharge. The report shall include:

1. Any variations from the Notice of Intent;
2. If the discharge resulted in any discoloration or turbidity in the receiving water and an explanation of upstream and downstream conditions identified in the receiving water monitoring required by section VII.A.3 of this Monitoring and Reporting Program;
3. Identification and explanation of any violations of this General Order;
4. Explanation of corrective actions taken to comply with this General Order; and
5. Identification and explanation of any complaints caused by the discharge.

## **X. REPORTING REQUIREMENTS**

### **A. General Monitoring and Reporting Requirements**

1. New Dischargers who have received a Notice of Applicability for coverage under this General Order shall inform the Central Valley Water Board 24 hours before the start of the discharge.
2. Authorized Dischargers shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
3. Upon written request of the Central Valley Water Board, a Discharger shall submit a summary monitoring report. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year(s).
4. A Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.
5. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.
6. Monitoring reports shall be submitted to the Central Valley Water Board each quarter. If no discharge occurred during the reporting quarter, the monitoring report shall document that there was no discharge.

**B. Self Monitoring Reports (SMRs)**

1. At any time during the term of this permit, the State Water Board or the Central Valley Water Board may notify authorized Dischargers to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site ([http://www.waterboards.ca.gov/water\\_issues/programs/ciwqs/](http://www.waterboards.ca.gov/water_issues/programs/ciwqs/)). Until such notification is given, each Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. Authorized Dischargers shall report in the SMR the results for all monitoring specified in this Monitoring and Reporting Program under sections III through IX. Dischargers shall submit quarterly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If a Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-6. Monitoring Periods and Reporting Schedule**

| Sampling Frequency | Monitoring Period Begins On...   | Monitoring Period  | SMR Due Date                                  |
|--------------------|--|--|---|
| 1/Discharge Event  | Notice of Applicability effective date   | All  | 1 May<br>1 August<br>1 November<br>1 February |
| Continuous         | Notice of Applicability effective date   | All  | 1 May<br>1 August<br>1 November<br>1 February |
| 2/Week             | Sunday following Notice of Applicability effective date or on Notice of Applicability effective date if on a Sunday  | Sunday through Saturday  | 1 May<br>1 August<br>1 November<br>1 February |
| 1/Month            | First day of calendar month following Notice of Applicability effective date or on Notice of Applicability effective date if that date is first day of the month | First day of calendar month through last day of calendar month   | 1 May<br>1 August<br>1 November<br>1 February |
| 2/Month            | First day of calendar month following Notice of Applicability effective date or on Notice of Applicability effective date if that date is first day of the month | First day of calendar month through last day of calendar month   | 1 May<br>1 August<br>1 November<br>1 February |
| 1/Quarter          | Closest of 1 January, 1 April, 1 July, or 1 October following (or on) Notice of Applicability effective date   | 1 January through 1 March<br>1 April through 30 June<br>1 July through 30 September<br>1 October through 31 December | 1 May<br>1 August<br>1 November<br>1 February |

- 4. Reporting Protocols.** Authorized Dischargers shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
  - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 5. Multiple Sample Data.** When determining compliance with an AMEL, AWEL, or MDEL for priority pollutants and more than one sample result is available, each Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
  - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case

the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

6. Authorized Dischargers shall submit SMRs in accordance with the following requirements:
  - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
  - b. Each Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
  - c. SMRs must be submitted to the Central Valley Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

Regional Water Quality Control Board  
Central Valley Region  
NPDES Compliance and Enforcement Unit  
11020 Sun Center Dr., Suite #200  
Rancho Cordova, CA 95670-6114

**C. Discharge Monitoring Reports (DMRs)**

**[Not Applicable]**

**D. Other Reports**

**[Not Applicable]**

## ATTACHMENT F – FACT SHEET

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## **ATTACHMENT F – FACT SHEET**

As described in the Findings in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

### **I. PERMIT INFORMATION**

#### **A. Background**

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act) was amended to provide that the discharge of pollutants to waters of the United States from any point source is effectively prohibited unless the discharge is in compliance with an National Pollutant Discharge Elimination System (NPDES) Permit.

On 22 September 1989, the United States Environmental Protection Agency (USEPA) granted the State of California, through the State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (Regional Water Boards), the authority to issue general NPDES permits pursuant to 40 Code of Federal Regulations (CFR) Parts 122 and 123.

40 CFR 122.28 provides for issuance of general permits to regulate a category of point sources if the sources involve the same or substantially similar types of operations; discharge the same type of waste; require the same type of effluent limitations or operating conditions; require similar monitoring; and are more appropriately regulated under a general order rather than individual orders.

#### **B. General Criteria**

1. This Order serves as a general NPDES Permit for the discharge to surface waters of wastewater with a low threat to water quality. The following dewatering and other low threat discharges may be covered under this General Order:
  - a. Well development water, which includes discharges associated with supply well installation, development, test pumping and purging;
  - b. Construction dewatering;
  - c. Pump/well testing, which includes discharges associated with the operation and maintenance activities of existing pumps and wells;

- d. Pipeline/tank pressure testing, which includes discharges associated with hydrostatic testing;
  - e. Pipeline/tank flushing or dewatering, which includes discharges associated with flushing, cleaning, and disinfection;
  - f. Condensate, which includes discharges associated with atmospheric condensates such as refrigeration, air conditioners, and compressor condensates and cooling towers;
  - g. Water supply system, which includes discharges associated with fire hydrant flushes and system operation, maintenance, and testing activities of a water supply system; and
  - h. Miscellaneous dewatering and low threat discharges, which includes discharges from potable water sources, drinking fountain water, foundation or footage drainage, sea water infiltration and discharges from fire fighting activities, irrigation of vegetative erosion control measures, street wash water, diverted stream flows, water from crawl space pumps, lawn watering, individual residential car washing, rising groundwaters and natural springs, groundwater infiltration as defined in 40 CFR 35.2005(b)(20) and uncontaminated pumped groundwater, flows from riparian habitats and wetlands, waters not otherwise containing wastes as defined in California Water Code (CWC) section 13050(d), and other types of discharges identified and recommended by the permittees and approved by the Central Valley Water Board.
2. On 17 April 1997, the State Water Board adopted Order No. 97-03-DWQ, NPDES General Permit No. CAS000001 for the regulation of storm water discharges associated with industrial activities. Special Condition D.1 of Order No. 97-03-DWQ authorizes non-storm water discharges. Special Condition D.1.c of Order No. 97-03-DWQ allows the Central Valley Water Board to establish additional monitoring and reporting requirements for these discharges. The Central Valley Water Board finds that the additional monitoring and reporting requirements and discharge limitations contained in this Order are necessary to assure compliance with water quality objectives and standards and that coverage under this Order is therefore necessary for the following discharges listed in Special Condition D.1 of Order No. 97-03-DWQ: fire hydrant flushing; potable water sources, including potable water related to the operation, maintenance, or testing of potable water systems; atmospheric condensates including refrigeration, air conditioning and compressor condensate, and groundwater dewatering systems.
3. On 19 August 1999, the State Water Board adopted Order No. 99-08-DWQ, NPDES General Permit No. CAS000002 for the regulation of storm water discharges associated with construction activities. Special Provision C.3 of Order No. 99-08-DWQ allows for the limited discharge of non-storm water discharges where they do not cause or contribute to a violation of any water quality standard. The Receiving Water Limitations of Order No. 99-08-DWQ requires compliance with all applicable water quality standards including those contained in the Basin Plans. The Central

Valley Water Board finds that Order No. 99-08-DWQ provides adequate water quality protection and compliance monitoring. Non-storm water discharges related to construction activities may continue to be regulated under Order No. 99-08-DWQ while construction activities continue.

4. This Order does not cover the following:
  - a. The treatment and discharge of water causing acute or chronic toxicity in the receiving water or containing chemicals or organic constituents, bacteria, herbicides, pesticides, oil and grease, radioactivity, salinity, or temperatures that may adversely threaten beneficial uses;
  - b. Wastewaters discharged to municipal wastewater collection systems;
  - c. Discharges to ponds, infiltration basins, spray disposal areas, subsurface infiltration, or other methods not involving discharge to surface waters and surface water drainage courses; and
  - d. Discharges of polluted groundwater, treated or untreated. There are many sites of groundwater pollution in the Central Valley Region of California. The pollution may have been caused by many factors including industrial activity, underground leaking tanks, and farming practices. This General Order is not intended for discharges of groundwater where such pollution exists, even if the project and/or proponent has no connection with the pollution.

## II. NOTIFICATION REQUIREMENTS

- A. Dischargers enrolling for coverage under this General Order are required to submit a complete Notice of Intent, as detailed in Attachment G, which includes:
  1. General information about the Discharger and the existing or proposed discharge.
  2. A project map which includes the location of the project, discharge point(s), and receiving water. The map shall also identify wells and residences within 1,500 feet.
  3. Evaluation of reclamation options.

Pursuant to section 2, Article X, California Constitution, and CWC section 275, on preventing waste and unreasonable use of waters of the state, the Central Valley Water Board encourages, wherever practicable, water conservation and/or re-use of wastewater. Therefore, to obtain coverage under this Order, Dischargers are required to evaluate their reclamation options. These options include:

- a. Sanitary Sewage System

If all the discharge is accepted by the local municipal wastewater treatment plant (WWTP), then authorization to discharge under an NPDES permit is not needed

for the proposed project. Dischargers may submit any denial or restrictive flow letter from the WWTP as proof that this option is not viable or explain why it is infeasible to connect to the WWTP.

**b. Land Disposal**

The land disposal option is usually restricted to the dry season (May through October) unless the Discharger can prove that the discharge can be retained on land during the wet season (November through April). All Dischargers must fully explain why land disposal is not a viable option.

**c. Underground Injection**

Additional information regarding the feasibility of underground injection as a disposal option can be obtained from the USEPA Region 9 Office, Underground Injection Control Unit.

**4. Blueprints of the proposed treatment system.**

Though treatment of the effluent is not required by this General Order, continuous compliance with the requirements of this General Order is required. If there is any doubt about the ability to continuously comply with the requirements of this General Order, the Discharger shall contact a professional engineer to assure the effluent is properly treated prior to discharge. Dischargers seeking authorization to discharge under this General Order must provide engineering blueprints of the existing or proposed treatment system to reduce any pollutants to levels that will meet the effluent limitations prior to discharging into surface waters. Plans submitted must be signed by a Registered Engineer or Geologist.

**5. Categorical exception for priority pollutant criteria and objectives.**

As discussed in section III.K of this General Order, section 5.3 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) allows the Central Valley Water Board to allow certain Dischargers short-term or seasonal exceptions from meeting priority pollutant criteria and objectives. These exceptions are for discharges that are necessary to implement control measures that fulfill statutory requirements regarding drinking water. Dischargers applying for a categorical exception to the priority pollutant criteria and objectives as authorized by section 5.3 of the SIP must submit the following information with the Notice of Intent:

- a.** A detailed description of the proposed action, including the proposed method of completing the action;
- b.** A time schedule;
- c.** A discharge and receiving water quality monitoring plan (before project initiation, during the project, and after project completion, with the appropriate quality assurance and quality control procedures);

- d. CEQA documentation;
  - e. Contingency plans;
  - f. Identification of alternate water supply (if needed); and
  - g. Residual waste disposal plans.
6. Wastewater sampling.

Dischargers applying for coverage under this Order are required to analyze the existing or proposed discharge for constituents regulated under the California Toxics Rule (CTR) and applicable Basin Plans (listed in Attachments B and C), and submit the results with the Notice of Intent.

The screening levels for the constituents in Attachments B and C are based on the most restrictive water quality objectives/criteria. The most restrictive criteria are necessary because this Order is intended as a general order and covers dewatering and low threat discharges to all surface waters in the Central Valley Region of California. If the analytical test results of the discharge show that any constituent concentrations exceed the water quality screening levels listed in Attachment B and Attachment C (if applicable), then the discharge will not be allowed under this General Order. If the analytical test results of the discharge show that all constituent concentrations are below the screening levels in Attachments B and C (if applicable), then the Discharger will be enrolled under this General Order.

Dischargers applying for an exception to the priority pollutant criteria and objectives, as authorized by section 5.3 of the SIP, are not required to analyze the existing or proposed discharge for constituents regulated under the CTR as listed in Attachment B. However, if the Central Valley Water Board finds that the discharge does not meet the requirements for an exception to the priority pollutant criteria and objectives, the Discharger will be required to analyze the existing or proposed discharge for the constituents regulated under the CTR as listed in Attachment B and submit the analytical test results.

Section 1.3, Step 8 of the SIP reads, in part, *“The RWQCB shall require periodic monitoring (at least once prior to the issuance and reissuance of a permit) for pollutants for which criteria or objectives apply and for which no effluent limitations have been established; however, the RWQCB may choose to exempt low volume discharges, determined to have no significant adverse impact on water quality, from this monitoring requirement.”* Certain types of low volume discharges (i.e., discharges having a daily average discharge flow less than 0.25 MGD) may qualify for an exception to the sampling requirements contained in Attachment B, provided the Discharger can sufficiently justify that the discharge will have no significant adverse impact on water quality. For example, discharges of potable water from line flushing could be exempt from pesticide analysis since the presence of such pesticides would not be allowed in the potable water system. Dischargers seeking an exception to the sampling requirements contained in Attachment B must submit

justification as part of the Notice of Intent. If the Central Valley Water Board finds that the justification is not sufficient to grant an exception to the sampling requirements, the Discharger will be required to analyze the existing or proposed discharge for all constituents regulated under the CTR, as listed in Attachment B, and submit the analytical test results.

If a Discharger discharges or proposes to discharge into a water quality limited segment (WQLS), the Discharger must sample the discharge for the constituents causing the impairment in the receiving water under the current 303(d) list and submit the result with the Notice of Intent. The list of WQLSs can be found under the Clean Water Act (CWA), Section 303(d) List at the web site: [http://www.waterboards.ca.gov/centralvalley/water\\_issues/tmdl/impaired\\_waters\\_list/2008\\_2010\\_usepa\\_303dlist/20082010\\_usepa\\_aprvd\\_303dlist.pdf](http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/impaired_waters_list/2008_2010_usepa_303dlist/20082010_usepa_aprvd_303dlist.pdf). If the analytical data demonstrate that constituent concentrations in the discharge will contribute to the impairment of the receiving water, the discharge will not be authorized under this General Order.

**7. Pollution Prevention and Monitoring and Reporting Program (PPMRP).**

Special Provision VII.C.2.b requires water suppliers having more than one discharge point to prepare and implement a PPMRP rather than identify and monitor each discharge, as required in sections IV and VIII of the Monitoring and Reporting Program (Attachment E). The PPMRP must be submitted with the Notice of Intent and is subject to approval by the Executive Officer. The PPMRP must include, at a minimum, the elements identified in Attachment H.

**8. Current State Water Board Adopted Permit Fees.** Information concerning the applicable fees can be found at <http://www.waterboards.ca.gov/resources/fees/>.

### **III. DISCHARGE DESCRIPTION**

#### **A. Discharge Description**

Individuals and miscellaneous public and private businesses often need to discharge clean or relatively pollutant-free wastewater that poses little or no threat to water quality. These discharges are typically low volume discharges and/or short-term in nature. This General Order covers dewatering and low threat discharges to surface waters of the United States which are either 4 months or less in duration or have a daily average discharge flow less than 0.25 MGD.

#### **B. Summary of Existing Requirements**

Effluent limitations contained in Order R5-2008-0081 for dewatering and other low threat discharges are as follows:

#### **Table F-1. Historic Effluent Limitations**

| Parameter                                | Units          | Effluent Limitations |                |                   |
|--|----------------|----------------------|----------------|-------------------|
|  |                | Monthly Average      | Weekly Average | Daily Maximum     |
| Biochemical Oxygen Demand (5-day @ 20°C) | mg/L           | 10                   | 15             | 30                |
| Total Suspended Solids                   | mg/L           | 10                   | 15             | 30                |
| Settleable Solids                        | mL/L           | --                   | --             | 0.1               |
| Chlorine, Total Residual                 | mg/L           | --                   | --             | 0.02 <sup>1</sup> |
| pH                                       | standard units | --                   | --             | <sup>2</sup>      |
| Average Dry Weather Flow                 | MGD            | --                   | --             | 0.25 <sup>3</sup> |

<sup>1</sup> Effluent discharged into a surface water body shall not contain chlorine in excess of 0.02 mg/L (instantaneous maximum). If the wastewater contains chlorine in excess of 0.02 mg/L, the Discharger shall certify that chlorine will be reduced to a maximum of 0.02 mg/L before wastes enter surface water.

<sup>2</sup> Effluent discharged into a surface water body shall not have a pH less than 6.5 nor greater than 8.5.

<sup>3</sup> The average dry weather (May through October) discharge flow shall not exceed 0.25 MGD unless the discharge is 4 months or less in duration in which case there is no flow limit.

#### IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the applicable plans, policies, and regulations identified in the Findings in section II of this Order. This section provides supplemental information, where appropriate, for the plans, policies, and regulations relevant to the discharge.

##### A. Legal Authorities

This Order is issued pursuant to section 402 of the federal CWA and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the CWC (commencing with section 13370). It shall serve as a NPDES permit for point source discharges of dewatering and other low threat wastewaters to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

##### B. California Environmental Quality Act (CEQA)

Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177. The Board's actions on issuing this permit for existing and new potable water discharges, and on the exceptions allowed by section 5.3 of the SIP is exempt from CEQA in accordance with California Code of Regulations, Title 14, Section 15061 (b)(3) which states that CEQA only applies to projects which have the potential for causing adverse environmental effects.

To satisfy the Categorical Exception requirements of Section 5.3 of the SIP, dischargers seeking enrollment under this General Order will be required to submit project-specific information to the Executive Officer on the discharge and its water quality effects. The information required by the SIP is presented in the application requirements contained in section V of Attachment G.



## C. State and Federal Regulations, Policies, and Plans

- 1. Water Quality Control Plans.** The Central Valley Water Board adopted a *Water Quality Control Plan, Fourth Edition (Revised October 2011)*, for the Sacramento and San Joaquin River Basins and a *Water Quality Control Plan, Second Edition (Revised January 2004)*, for the Tulare Lake Basin (hereinafter Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives for all waters addressed through the plans. In addition, the Basin Plans implement State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The Basin Plans identify the typical beneficial uses as follows: municipal and domestic supply; agricultural irrigation; stock watering; process supply; service supply; hydropower supply; water contact recreation; canoeing and rafting recreation; other non-contact water recreation; warm freshwater aquatic habitat; cold freshwater habitat; warm fish migration habitat; cold fish migration habitat; warm and cold spawning habitat; wildlife habitat; navigation; rare, threatened, or endangered species habitat; groundwater recharge; and freshwater replenishment.

Requirements of this Order implement the Basin Plans.

- 2. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on 22 December 1992, and later amended it on 4 May 1995 and 9 November 1999. About 40 criteria in the NTR applied in California. On 18 May 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on 13 February 2001. These rules contain water quality criteria for priority pollutants.
- 3. State Implementation Policy.** On 2 March 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on 28 April 2000 with respect to the priority pollutant criteria promulgated for California by USEPA through the NTR and to the priority pollutant objectives established by the Central Valley Water Board in the Basin Plans. The SIP became effective on 18 May 2000 with respect to the priority pollutant criteria promulgated by USEPA through the CTR. The State Water Board adopted amendments to the SIP on 24 February 2005 that became effective on 13 July 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control.

Section 5.3 of the SIP authorizes the Central Valley Water Board, after compliance with CEQA, to allow certain Dischargers short-term or seasonal exceptions from meeting priority pollutant criteria and objectives. This General Order authorizes a categorical exception to priority pollutant criteria and objectives for Dischargers who submit the appropriate information required by the SIP as required in the Notice of Intent (see Attachment G).

Requirements of this Order implement the SIP.

4. **Alaska Rule.** On 30 March 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes (40 CFR 131.21, 65 Fed. Reg. 24641 (27 April 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after 30 May 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by 30 May 2000, may be used for CWA purposes, whether or not approved by USEPA.
5. **Antidegradation Policy.** 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plans implement, and incorporate by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR 131.12 and Resolution No. 68-16. As discussed in detail in the section V.D.4. of this Fact Sheet, the discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution 68-16.
6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Compliance with the anti-backsliding requirements is discussed in Section V.D.3.
7. **Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limitations, receiving water limitations, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

#### **D. Impaired Water Bodies on CWA 303(d) List**

1. Under section 303(d) of the 1972 CWA, states, territories and authorized tribes are required to develop lists of water quality limited segments. The waters on these lists do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. On 30 November 2006 USEPA gave final approval to California's 2006 section 303(d)

list of WQLSs. The Basin Plans references this list of WQLSs, which are defined as “... *those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources* (40 CFR Part 130, et seq.).” The Basin Plans also states, “*Additional treatment beyond minimum federal standards will be imposed on dischargers to [WQLSs]. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment.*” Impaired waters do not support beneficial uses. If discharging or proposing to discharge into a WQLS, the Discharger must provide wastewater analysis of the 303(d) listed constituents of concern as part of the Notice of Intent.

## **E. Other Plans, Policies, and Regulations**

1. The *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (Bay-Delta Plan). The requirements within this Order are consistent with the Bay-Delta Plan.

## **V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

Effluent limitations and toxic and pretreatment effluent standards established pursuant to sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information and Guidelines), and 307 (Toxic and Pretreatment Effluent Standards) of the CWA and amendments thereto are applicable to the discharge.

The CWA mandates the implementation of effluent limitations that are as stringent as necessary to meet water quality standards established pursuant to state or federal law [33 U.S.C., §1311(b)(1)(C); 40 CFR 122.44(d)(1)]. NPDES permits must incorporate discharge limits necessary to ensure that water quality standards are met. This requirement applies to narrative criteria as well as to criteria specifying maximum amounts of particular pollutants. Pursuant to federal regulations, 40 CFR 122.44(d)(1)(i), NPDES permits must contain limits that control all pollutants that “*are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality.*” Federal regulations, 40 CFR 122.44(d)(1)(vi), further provide that “[w]here a state has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the permitting authority must establish effluent limits.”

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the *Code of Federal Regulations*: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the

receiving water where numeric water quality objectives have not been established. The Basin Plans at page IV-17.00 for the Sacramento and San Joaquin River Basins and at page IV-21 for the Tulare Lake Basin, contain an implementation policy, “*Policy for Application of Water Quality Objectives*” for the Sacramento and San Joaquin River Basins and “*Application of Water Quality Objectives*” for the Tulare Lake Basin, that specify that the Central Valley Water Board “*will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives.*” This Policy complies with 40 CFR 122.44(d)(1). With respect to narrative objectives, the Central Valley Water Board must establish effluent limitations using one or more of three specified sources, including (1) USEPA’s published water quality criteria, (2) a proposed state criterion (i.e., water quality objective) or an explicit state policy interpreting its narrative water quality criteria (i.e., the Central Valley Water Board’s “*Policy for Application of Water Quality Objectives*”)(40 CFR 122.44(d)(1)(vi)(A), (B) or (C)), or (3) an indicator parameter. The Basin Plans contain a narrative objective requiring that: “*All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life*” (narrative toxicity objective). The Basin Plans require the application of the most stringent objective necessary to ensure that surface water and groundwater do not contain chemical constituents, discoloration, toxic substances, radionuclides, or taste and odor producing substances that adversely affect beneficial uses. The Basin Plans state that material and relevant information, including numeric criteria, and recommendations from other agencies and scientific literature will be utilized in evaluating compliance with the narrative toxicity objective. The Basin Plans also limit chemical constituents in concentrations that adversely affect surface water beneficial uses. The Basin Plans further state that, to protect all beneficial uses, the Central Valley Water Board may apply limits more stringent than maximum contaminant levels (MCLs).

## **A. Discharge Prohibitions**

1. As stated in section I.G of Attachment D, Standard Provisions, this Order prohibits bypass from any portion of the treatment facility. Federal regulations, 40 CFR 122.41(m), define “bypass” as the intentional diversion of waste streams from any portion of a treatment facility. This section of the federal regulations, 40 CFR 122.41(m)(4), prohibits bypass unless it is unavoidable to prevent loss of life, personal injury, or severe property damage. In considering the Central Valley Water Board’s prohibition of bypasses, the State Water Board adopted a precedential decision, Order No. WQO 2002-0015, which cites the federal regulations, 40 CFR 122.41(m), as allowing bypass only for essential maintenance to assure efficient operation.
2. The discharges authorized by this General Order are low-volume discharges and/or short-term in nature, and therefore have a low threat to water quality. For the purposes of this Order, discharges having a daily average discharge flow less than 0.25 MGD will be considered low volume discharges. Discharges less than 4 months in duration will be considered short-term discharges. Consistent with Order R5-2008-0081, this Order prohibits discharges that have a daily average discharge flow greater than 0.25 MGD unless the discharge is less than 4 months in duration. The Central Valley Water Board will regulate discharges that do not meet these criteria by individual orders.

## **B. Technology-Based Effluent Limitations**

### **1. Scope and Authority**

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including 5-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), fecal coliform, pH, and oil and grease. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines, and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. CWA section 402(a)(1) and 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR 125.3.

## 2. Applicable Technology-Based Effluent Limitations

- a. The types of dewatering and other low threat discharges authorized by this General Order are described in Section I.B.1, above. These types of discharges are considered high-quality wastewaters that are relatively pollutant-free and pose a low threat to water quality. Based on available effluent data from the dewatering and other low threat discharges authorized by this Order, the Central Valley Water Board has established technology-based effluent limitations for biochemical oxygen demand, total suspended solids, and settleable solids based on BPJ. These effluent limits are carried forward from Order R5-2008-0081.

### Summary of Technology-based Effluent Limitations Discharge Point No. 001

**Table F-2. Summary of Technology-based Effluent Limitations**

| Parameter                                | Units | Effluent Limitations |                |               |
|--|-------|----------------------|----------------|---------------|
|  |       | Average Monthly      | Average Weekly | Maximum Daily |
| Biochemical Oxygen Demand (5-day @ 20°C) | mg/L  | 10                   | 15             | 30            |
| Total Suspended Solids                   | mg/L  | 10                   | 15             | 30            |
| Settleable Solids                        | mL/L  | --                   | --             | 0.1           |

## C. Water Quality-Based Effluent Limitations (WQBELs)

### 1. Scope and Authority

Section 301(b) of the CWA and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plans, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

## 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

- a. Receiving Water.** Dewatering and other low threat discharges may potentially discharge to all surface waters in the Central Valley. Beneficial uses for the Sacramento and San Joaquin River Basins are as follows: municipal and domestic supply, agricultural irrigation, stock watering, process supply, service supply, and hydropower supply, water contact recreation, canoeing and rafting recreation, other non-contact water recreation, warm freshwater aquatic habitat, cold freshwater aquatic habitat, warm fish migration habitat, cold fish migration habitat, warm and cold spawning habitat, wildlife habitat, and navigation. Beneficial uses for the Tulare Lake Basin are: municipal and domestic supply; agricultural irrigation; agricultural stock watering; industrial process water supply; process water supply; hydropower supply; water contact recreation; other non-contact water recreation; warm freshwater aquatic habitat; cold freshwater aquatic habitat; wildlife habitat; rare, threatened, or endangered species habitat; cold spawning habitat; groundwater recharge; and freshwater replenishment.
- b. Hardness.** While no effluent limitation for hardness is necessary in this Order, hardness is critical to the assessment of reasonable potential for certain metals. The California Toxics Rule, at (c)(4), states the following:

*“Application of metals criteria. (i) For purposes of calculating freshwater aquatic life criteria for metals from the equations in paragraph (b)(2) of this section, for waters with a hardness of 400 mg/L or less as calcium carbonate, the actual ambient hardness of the surface water shall be used in those equations.”*  
[emphasis added]

The State Water Board, in footnote 19 to Water Quality Order No. 2004-0013, stated: *“We note that...the Regional Water Board...applied a variable hardness value whereby effluent limitations will vary depending on the actual, current hardness values in the receiving water. We recommend that the Regional Water Board establish either fixed or seasonal effluent limitations for metals, as provided in the SIP, rather than ‘floating’ effluent limitations.”*

This General Order does not authorize discharges that have the reasonable potential to exceed water quality objectives. Therefore, screening levels must be set to protect the beneficial uses of the receiving water for all discharge conditions. In the absence of the option of including condition-dependent, “floating” screening levels that are reflective of actual conditions at the time of discharge, effluent limitations must be set using a reasonable worst-case condition in order to protect beneficial uses for all discharge conditions. Dependent on receiving water conditions, use of either the lowest observed effluent hardness or the lowest observed receiving water hardness may be more protective of aquatic life beneficial uses. For example, under effluent dominated discharge conditions, use of the lowest observed effluent hardness is the most protective.

This permit includes screening levels for cadmium, chromium (III), copper, lead, nickel, silver, and zinc which are dependent on water hardness. The CTR expresses the objectives for these metals through equations where the hardness of the receiving water is a variable. To simplify the permitting process, it was necessary that fixed hardness values be used in these equations. To calculate screening levels for waters with hardness concentrations less than 50 mg/L, a hardness value of 25 mg/L was used. To calculate screening levels for waters with hardness concentrations greater than or equal to 50 mg/L but less than 100 mg/L, a hardness value of 75 mg/L was used. To calculate screening levels for waters with hardness concentrations greater than or equal to 100 mg/L but less than 200 mg/L, a hardness value of 150 mg/L was used, and to calculate screening levels for waters with hardness concentrations greater than or equal to 200 mg/L, a hardness value of 200 mg/L was used.

The Order requires the Discharger to analyze the proposed effluent and the upstream receiving water for hardness and submit the analytical results with the Notice of Intent. Due to the uncertainty of the various types of discharge conditions that could be covered under this General Order, and in order to ensure the protection of water quality for all discharge conditions, the lowest hardness value of the proposed effluent and upstream receiving water will be used to determine the appropriate screening level (see Table B-2 of Attachment B and Table C-2 of Attachment C).

- c. Assimilative Capacity/Mixing Zone.** The effluent limitations for dewatering and other low threat discharges are calculated assuming no dilution. For most practical purposes, discharges from these operations do not flow directly into a receiving water with significant volume to consider dilution credit or to allocate a mixing zone. Many creeks and streams in the Central Valley are dry during the summer months. Therefore, for many months of the year, these discharges may represent all or nearly all of the flow in some portions of the receiving creeks or streams. Because this Order is intended to serve as a general order and covers discharges to all surface waters in the Central Valley, the effluent limitations established pursuant to this General Order are established to achieve the most protective water quality objective for the surface water beneficial uses in the Central Valley. Therefore, it is assumed there is no assimilative capacity and no dilution credits have been granted.

An exception to this assumption may be applied based on the demonstration of a mixing zone in accordance with section 1.4.2 of the SIP and an approved mixing zone study demonstrating compliance with water quality objectives in the receiving water as prescribed in the Basin Plans. This exception process is more appropriate for an individual order, and would not be appropriate for a general order, that should be protective of most stringent water quality objectives and beneficial uses. If a Discharger requests that a dilution credit be included in the computation of an effluent limitation or that a mixing zone be allowed, an individual order will be required. However, if no mixing zone is proposed, this



General Order provides coverage for all discharges to receiving waters in the Central Valley Region.

### 3. Determining the Need for WQBELs

- a. CWA section 301 (b)(1) requires NPDES permits to include effluent limitations that achieve technology-based standards and any more stringent limitations necessary to meet water quality standards. Water quality standards include Central Valley Water Board Basin Plan beneficial uses and narrative and numeric water quality objectives, State Water Board-adopted standards, and federal standards, including the CTR and NTR. The Basin Plans include numeric site-specific water quality objectives and narrative objectives for toxicity, chemical constituents, and tastes and odors. The narrative toxicity objective states: *“All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.”* With regards to the narrative chemical constituents objective, the Basin Plans state that waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. At minimum, *“...water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs)” in Title 22 of CCR.* The narrative tastes and odors objective states: *“Water shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to domestic or municipal water supplies or to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses.”*
- b. Federal regulations require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numerical water quality standard.
- c. This Order requires Dischargers seeking authorization to discharge under this General Order to provide analysis of the proposed effluent. As described below, based on these analyses, the Central Valley Water Board shall conduct an RPA in accordance with section 1.3, Step 7 of the SIP by comparing the results to the screening criteria contained in Attachment B and Attachment C (if applicable) to determine reasonable potential. Although the SIP applies directly to the control of CTR priority pollutants, the State Water Board has held that the Central Valley Water Board may use the SIP as guidance for water quality-based toxics control.<sup>1</sup> The SIP states in the introduction *“The goal of this Policy is to establish a standardized approach for permitting discharges of toxic pollutants to non-ocean surface waters in a manner that promotes statewide consistency.”* Therefore, in this Order the RPA procedures from the SIP were used to evaluate reasonable potential for both CTR and non-CTR constituents.

#### d. All Dewatering and Other Low Threat Discharges

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<sup>1</sup> See Order WQO 2001-16 (Napa) and Order WQO 2004-0013 (Yuba City).

- i. **Chlorine Residual.** Dewatering and other low threat discharges may contain chlorine, which is extremely toxic to aquatic organisms. Due to the potential for chlorine to be discharged, these discharges have a reasonable potential to cause or contribute to an in-stream excursion above the Basin Plans' narrative toxicity objective. In order to protect the beneficial uses of the receiving water, this Order includes effluent limitations for total residual chlorine.

The USEPA *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001) contains statistical methods for converting chronic (4-day) and acute (1-hour) aquatic life criteria to average monthly and maximum daily effluent limitations based on the variability of the existing data and the expected frequency of monitoring. Because projects that would be granted coverage under this General Order are typically short in duration, reasonable potential exists for acute toxicity over short periods of time and an average 1-hour limitation is considered more appropriate than an average daily limitation. Average 1-hour and 4-day effluent limitations for chlorine, based on USEPA Quality Criteria for Water, May 1986 [The Gold Book], are included in this Order.

The San Francisco Bay Regional Water Quality Control Board (San Francisco Water Board) included a reporting level of 0.08 mg/L to determine compliance with the effluent limitations contained in the General Order for Discharges from Surface Water Treatment Facilities for Potable Supply (Order No. R2-2003-0062, NPDES No. CAG382001). The reporting level of 0.08 mg/L represents a level that handheld field meters are capable of achieving. The Central Valley Water Board concurs with the approach used by the San Francisco Water Board. Therefore, this Order requires dischargers to utilize a method capable of achieving a reporting level of 0.08 mg/L, consistent with the reporting level required by the San Francisco Water Board, until the State Water Board adopts a statewide policy with a specified reporting level achievable in the field and laboratory. A reopener has been included that will allow the Central Valley Water Board to reopen the Order if a statewide policy for total residual chlorine takes effect during the term of the permit, to allow the Central Valley Water Board to make modifications consistent with the statewide policy. If the statewide policy includes a reporting level more stringent than 0.08 mg/L, the General Order will automatically incorporate the statewide reporting level.

- ii. **Priority Pollutants.** This General Order is not intended to regulate discharges that have the reasonable potential to exceed water quality standards, which would be more appropriately regulated by an individual order. Since this is a general order for all dewatering and other low threat discharges to surface waters in the Central Valley of California, this General Order establishes screening levels in Attachment B that are protective of beneficial uses under all discharge conditions and are based on the most protective water quality criteria for priority pollutants. Dischargers enrolling

under this Order are required to analyze the proposed discharge for constituents regulated under the CTR and submit the results as part of the Notice of Intent. If the analytical data demonstrate that any constituent concentrations in the discharge exceed the water quality screening levels listed in Attachment B, the discharge will not be allowed under this General Order. If all constituent concentrations are below the screening levels listed in Attachment B, the discharge will be authorized for coverage under this General Order.

Several priority pollutants do not have applicable CTR criteria or MCLs. However, water quality limits have been developed to interpret narrative Basin Plan objectives for several of these pollutants which include chloroethane, methyl chloride, 2-nitrophenol, 4-nitrophenol, 3-methyl-4-chlorophenol, 4-bromophenyl phenyl ether, 2,6-dinitrotoluene, naphthalene, and delta-BHC. Analysis of dilution, proximity of downstream diversions, and other factors is required in order to determine the applicability of interpreting the narrative objective for these pollutants based on water quality limits. This type of analysis is beyond the scope of this General Order. In addition to these pollutants, several priority pollutants have no CTR criteria, MCLs, or alternative water quality limits to interpret narrative Basin Plan objectives. These pollutants include 2-chloroethylvinyl ether, acenaphthylene, benzo(ghi)perylene, bis(2-chloroethoxy)methane, 4-chlorophenyl phenyl ether, di-n-octyl phthalate, and phenanthrene. A screening requirement for pollutants that do not have applicable criteria is included in Attachment B. Due to the short-term and low volume nature of the discharges covered by this General Order and the lack of applicable criteria, effluent limitations for these pollutants are not established in this General Order. However, if the analytical data demonstrate that constituent concentrations are present in the effluent at levels that affect the beneficial uses of the receiving water, then authorization for coverage under this Order will be denied and coverage under an individual permit will be required (including analysis of appropriate water quality criteria necessary to protect the beneficial uses of the receiving water).

Table F-3 summarizes the bases of screening levels contained in Attachment B.

**Table F-3. Summary of Screening Level Bases for Priority Pollutants**

| Parameter                    | Basis <sup>1</sup> |
|------------------------------|--------------------|
| Antimony, Total Recoverable  | HH, MCL            |
| Arsenic, Total Recoverable   | HH, MCL            |
| Beryllium, Total Recoverable | HH, MCL            |
| Cadmium, Total Recoverable   | AL, CTR            |
| Chromium (III)               | AL, CTR            |
| Chromium (VI)                | AL, CTR            |
| Copper, Total Recoverable    | AL, CTR            |
| Lead, Total Recoverable      | AL, CTR            |

| Parameter                   | Basis <sup>1</sup> |
|-----------------------------|--------------------|
| Mercury, Total Recoverable  | HH, CTR            |
| Nickel, Total Recoverable   | AL, CTR            |
| Selenium, Total Recoverable | AL, CTR            |
| Silver, Total Recoverable   | AL, CTR            |
| Thallium, Total Recoverable | HH, CTR            |
| Zinc, Total Recoverable     | AL, CTR            |
| Cyanide, Total (as CN)      | AL, CTR            |
| Asbestos                    | HH, CTR            |
| 2,3,7,8-TCDD                | HH, CTR            |
| Acrolein                    | HH, CTR            |
| Acrylonitrile               | HH, CTR            |
| Benzene                     | HH, MCL            |
| Bromoform                   | HH, CTR            |
| Carbon Tetrachloride        | HH, CTR            |
| Chlorobenzene               | HH, MCL            |
| Chlorodibromomethane        | HH, CTR            |
| Chloroform                  | HH, MCL            |
| Dichlorobromomethane        | HH, CTR            |
| 1,1-Dichloroethane          | HH, MCL            |
| 1,2-Dichloroethane          | HH, CTR            |
| 1,1-Dichloroethylene        | HH, CTR            |
| 1,2-Dichloropropane         | HH, CTR            |
| 1,3-Dichloropropylene       | HH, MCL            |
| Ethylbenzene                | HH, MCL            |
| Methyl Bromide              | HH, CTR            |
| Methylene Chloride          | HH, CTR            |
| 1,1,2,2-Tetrachloroethane   | HH, CTR            |
| Tetrachloroethylene         | HH, CTR            |
| Toluene                     | HH, MCL            |
| 1,2-Trans-Dichloroethylene  | HH, MCL            |
| 1,1,1-Trichloroethane       | HH, MCL            |
| 1,1,2-Trichloroethane       | HH, CTR            |
| Trichloroethylene           | HH, CTR            |
| Vinyl Chloride              | HH, MCL            |
| 2-Chlorophenol              | HH, CTR            |
| 2,4-Dichlorophenol          | HH, CTR            |
| 2,4-Dimethylphenol          | HH, CTR            |
| 2-Methyl-4,6-Dinitrophenol  | HH, CTR            |
| 2,4-Dinitrophenol           | HH, CTR            |
| Pentachlorophenol           | HH, CTR            |
| Phenol                      | HH, CTR            |
| 2,4,6-Trichlorophenol       | HH, CTR            |
| Acenaphthene                | HH, CTR            |
| Anthracene                  | HH, CTR            |
| Benzidine                   | HH, CTR            |
| Benzo(a)Anthracene          | HH, CTR            |
| Benzo(a)Pyrene              | HH, CTR            |
| Benzo(b)Fluoranthene        | HH, CTR            |
| Benzo(k)Fluoranthene        | HH, CTR            |
| Bis(2-Chloroethyl)Ether     | HH, CTR            |
| Bis(2-Chloroisopropyl)Ether | HH, CTR            |

| Parameter                  | Basis <sup>1</sup> |
|----------------------------|--------------------|
| Bis(2-Ethylhexyl)Phthalate | HH, CTR            |
| Butylbenzyl Phthalate      | HH, CTR            |
| 2-Chloronaphthalene        | HH, CTR            |
| Chrysene                   | HH, CTR            |
| Dibenzo(a,h)Anthracene     | HH, CTR            |
| 1,2-Dichlorobenzene        | HH, MCL            |
| 1,3-Dichlorobenzene        | HH, CTR            |
| 1,4-Dichlorobenzene        | HH, MCL            |
| 3,3 Dichlorobenzidine      | HH, CTR            |
| Diethyl Phthalate          | HH, CTR            |
| Dimethyl Phthalate         | HH, CTR            |
| Di-n-Butyl Phthalate       | HH, CTR            |
| 2,4-Dinitrotoluene         | HH, CTR            |
| 1,2-Diphenylhydrazine      | HH, CTR            |
| Fluoranthene               | HH, CTR            |
| Fluorene                   | HH, CTR            |
| Hexachlorobenzene          | HH, CTR            |
| Hexachlorobutadiene        | HH, CTR            |
| Hexachlorocyclopentadiene  | HH, MCL            |
| Hexachloroethane           | HH, CTR            |
| Indeno(1,2,3-cd)Pyrene     | HH, CTR            |
| Isophorone                 | HH, CTR            |
| Nitrobenzene               | HH, CTR            |
| N-Nitrosodimethylamine     | HH, CTR            |
| N-Nitrosodi-n-Propylamine  | HH, CTR            |
| N-Nitrosodiphenylamine     | HH, CTR            |
| Pyrene                     | HH, CTR            |
| 1,2,4-Trichlorobenzene     | HH, MCL            |
| Aldrin                     | HH, CTR            |
| alpha-BHC                  | HH, CTR            |
| beta-BHC                   | HH, CTR            |
| gamma-BHC                  | HH, CTR            |
| Chlordane                  | HH, CTR            |
| 4,4'-DDT                   | HH, CTR            |
| 4,4'-DDE (linked to DDT)   | HH, CTR            |
| 4,4'-DDD                   | HH, CTR            |
| Dieldrin                   | HH, CTR            |
| alpha-Endosulfan           | AL, CTR            |
| beta-Endosulfan            | AL, CTR            |
| Endosulfan Sulfate         | HH, CTR            |
| Endrin                     | AL, CTR            |
| Endrin Aldehyde            | AL, CTR            |
| Heptachlor                 | HH, CTR            |
| Heptachlor Epoxide         | HH, CTR            |
| PCBs sum <sup>3</sup>      | HH, CTR            |
| Toxaphene                  | AL, CTR            |

<sup>1</sup> HH-Human health criteria.  
MCL - Based on Primary Maximum Contaminant Level.  
AL-Aquatic life criteria.  
CTR - Based on water quality criteria contained in the California Toxics Rule, and applied as specified in the SIP.

## e. Discharges to Specific Waterbodies

- i. The Basin Plans establish specific water quality criteria for discharges to specific watersheds/reaches and are included as screening levels in Attachment C. If the discharge is within an applicable watershed/reach included in Attachment C, the Discharger is required to analyze a representative sample of the discharge for the applicable pollutants and submit the results as part of the Notice of Intent. The screening levels contained in Attachment C supercede those contained in Attachment B for respective parameters applicable to the discharge. If the analytical data demonstrate that constituent concentrations in the discharge exceed the water quality screening levels listed in Attachment C, the discharge will not be allowed under this General Order. If all constituent concentrations are below the screening levels listed in Attachment C, the discharge will be authorized for coverage under this General Order.
- ii. The Basin Plan for the Sacramento and San Joaquin River Basins includes a water quality objective for surface waters (except for Goose Lake) that the "...pH shall not be depressed below 6.5 nor raised above 8.5." The Basin Plan for the Tulare Lake Basin includes a water quality objective for surface waters that the "...pH shall not be depressed below 6.5, raised above 8.3, or changed at any time more than 0.3 units from normal ambient pH." Effluent limitations for pH are included in this Order based on the Basin Plan objectives for pH.

## 4. WQBEL Calculations

The effluent limitations for chlorine residual were based on the Basin Plans' narrative toxicity objective and are applied directly as 4-day and 1-hour average effluent limitations. The effluent limitation for settleable solids was retained from Order R5-2008-0081 and was applied as a maximum daily effluent limitation. Basin Plan-specific objectives for pH were applied as instantaneous effluent limitations.

### Summary of WQBELs Discharge Point No. 001

**Table F-4. Summary of WQBELs**

| Parameter                | Units          | Maximum Daily Effluent Limitation | 4-Day Average | 1-Hour Average |
|--------------------------|----------------|-----------------------------------|---------------|----------------|
| Chlorine, Total Residual | mg/L           | --                                | 0.011         | 0.019          |
| pH                       | Standard units | --                                | --            | --             |

The pH of all dewatering and other low threat discharges within the Sacramento and San Joaquin River Basins (except Goose Creek) shall at all times be within the range of 6.5 and 8.5. The pH of all dewatering and other low threat discharges to Goose Creek shall at all times be within the range of 7.5 and 9.5. The pH of all dewatering and other low threat discharges within the Tulare Lake Basin shall at all times be within the range of 6.5 and 8.3.

## **5. Whole Effluent Toxicity (WET)**

The Basin Plans contain a narrative toxicity objective that states, “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.” (Basin Plan at page III-8.00 for the Sacramento and San Joaquin River Basins and III-6 for the Tulare Lake Basin.) The dewatering and other low threat discharges authorized by this General Order have a low threat to water quality. Because the discharges authorized by this General Order are low volume and/or short-term in nature and are not expected to contribute to acute or chronic toxicity, effluent limitations for acute toxicity and acute and chronic WET testing is not required by this General Order.

## **D. Final Effluent Limitations**

### **1. Mass-based Effluent Limitations**

**[Not Applicable]**

### **2. Averaging Periods for Effluent Limitations**

40 CFR 122.45 (d) requires maximum daily and average monthly discharge limitations for all dischargers other than publicly owned treatment works unless impracticable. Effluent limitations for pH are based on numeric objectives contained in the Basin Plans and are established as instantaneous effluent limitations. The effluent limitations for BOD<sub>5</sub> and TSS are based on the expectation that the water quality of low threat discharges authorized by this General Order will be similar in characteristics of wastewater that receives tertiary treatment and reflects the effluent limitations required of a treatment plant that uses tertiary treatment (as reflected in maximum daily, average weekly, and average monthly effluent limitations). The effluent limitations for chlorine residual were based on the Basin Plans’ narrative toxicity objectives and are applied directly as 4-day and 1-hour average effluent limitations.

### **3. Satisfaction of Anti-Backsliding Requirements**

All effluent limitations in this Order are at least as stringent as the effluent limitations in previous Order R5-2008-0081.

### **4. Satisfaction of Antidegradation Policy**

The permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Due to the expected short-term duration and the low volume of discharge expected from Dischargers regulated under this Order, the impact on existing water quality will be insignificant. This Order also requires all dischargers to implement practices to minimize the discharge of salinity to receiving waters. If, however, the Central Valley Water Board, subsequent to review of any Notice of

Intent, finds that the impact of a discharge will not be insignificant, then authorization for coverage under this Order will be denied and coverage under an individual permit will be required (including preparation of an antidegradation analysis).

## 5. Summary of Final Effluent Limitations

### a. All Dewatering and Other Low Threat Discharges

**Table F-5. Summary of Final Effluent Limitations**

| Parameter                                | Units | Effluent Limitations |                |               | Basis <sup>1</sup> |
|--|-------|----------------------|----------------|---------------|--------------------|
|  |       | Average Monthly      | Average Weekly | Maximum Daily |                    |
| Biochemical Oxygen Demand (5-day @ 20°C) | mg/L  | 10                   | 15             | 30            | TB, PO             |
| Chlorine, Total Residual                 | mg/L  | --                   | --             | <sup>2</sup>  | NAWQC              |
| Settleable Solids                        | mL/L  | --                   | --             | 0.1           | BP, PO             |
| Total Suspended Solids                   | mg/L  | 10                   | 15             | 30            | TB, PO             |

<sup>1</sup> TB – Technology-based effluent limitation based on the expectation that the water quality of low threat discharges authorized by this General Order will be characteristic of wastewater that receives tertiary treatment and reflects similar requirements established in permits for tertiary treatment plants by the Central Valley Water Board.

PO – Based on effluent limitations established in Order R5-2008-0081

NAWQC – Based on USEPA's National Ambient Water Quality Criteria for the protection of freshwater aquatic life.

BP – Based on water quality objectives contained in the Basin Plans.

<sup>2</sup> The discharge shall not exceed the following effluent limitations for total residual chlorine:

- a. 0.011 mg/L, as a 4-day average; and
- b. 0.019 mg/L, as a 1-hour average.

### b. Discharges to Specific Waterbodies

- i. The pH of all dewatering and other low threat within the Sacramento and San Joaquin River Basins (except Goose Creek) shall at all times be within the range of 6.5 and 8.5.
- ii. The pH of all dewatering and other low threat discharges to Goose Creek shall at all times be within the range of 7.5 and 9.5.
- iii. The pH of all dewatering and other low threat discharges within the Tulare Lake Basin shall at all times be within the range of 6.5 and 8.3.

## E. Interim Effluent Limitations

[Not Applicable]

## F. Land Discharge Specifications

[Not Applicable]



## **G. Reclamation Specifications**

**[Not Applicable]**

## **VI. RATIONALE FOR RECEIVING WATER LIMITATIONS**

Basin Plan water quality objectives to protect the beneficial uses of surface water and groundwater include numeric objectives and narrative objectives, including objectives for chemical constituents, toxicity, and tastes and odors. The toxicity objective requires that surface water and groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, animals, or aquatic life. The chemical constituent objective requires that surface water and groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use or that exceed the MCLs in Title 22, CCR. The tastes and odors objective states that surface water and groundwater shall not contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses. The Basin Plans require the application of the most stringent objective necessary to ensure that surface water and groundwater do not contain chemical constituents, toxic substances, radionuclides, or taste and odor producing substances in concentrations that adversely affect domestic drinking water supply, agricultural supply, or any other beneficial use.

### **A. Surface Water**

1. CWA section 303(a-c) requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The Central Valley Water Board adopted water quality criteria as water quality objectives in the Basin Plans. The Basin Plans state that “[t]he numerical and narrative water quality objectives define the least stringent standards that the Regional Water Board will apply to regional waters in order to protect the beneficial uses.” The Basin Plans include numeric and narrative water quality objectives for various beneficial uses and water bodies. This Order contains receiving surface water limitations based on the Basin Plans’ numerical and narrative water quality objectives for ammonia, bacteria, biostimulatory substances, chemical constituents, color, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, suspended sediment, settleable substances, suspended material, tastes and odors, temperature, toxicity, and turbidity. This Order also requires compliance with any amendment or revision to the water quality objectives contained in the Basin Plans adopted by the Central Valley Water Board subsequent to adoption of this Order.

### **B. Groundwater**

**[Not Applicable]**

## **VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorizes the Central Valley Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (Attachment E) of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program for dewatering and other low threat discharges.

### **A. Influent Monitoring**

**[Not Applicable]**

### **B. Effluent Monitoring**

1. Pursuant to the requirements of 40 CFR 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the treatment process (where applicable), and to assess the impacts of the discharge on the receiving stream.
2. For discharges with a duration greater than 4 months, the effluent monitoring frequencies and sample types for BOD<sub>5</sub> (quarterly), TSS (quarterly), settleable solids (quarterly), flow (continuous), temperature (monthly), and pH (monthly) have been retained from Order R5-2008-0081.
3. For discharges with a duration less than 4 months, the effluent monitoring frequencies (twice monthly) and sample types for BOD<sub>5</sub>, TSS, settleable solids, and pH have been retained from Order R5-2008-0081.
4. Effluent limitations have been established in this Order for chlorine residual. Therefore, monitoring has been established in this Order to determine compliance with the effluent limitations for chlorine residual (quarterly for discharges with a duration greater than 4 months and once per discharge event for discharges with a duration less than 4 months).
5. To address increasing salinity levels in receiving waters in the Central Valley Region of California, this General Order requires Dischargers to implement practices to minimize the discharge of salinity. Monitoring for electrical conductivity is established in this General Order to characterize salinity in dewatering and other low threat discharges and to ensure that the discharge of salinity to the receiving water is minimized (quarterly for discharges with a duration greater than 4 months and twice monthly for discharges with a duration less than 4 months).

### **C. Whole Effluent Toxicity Testing Requirements**

The dewatering and other low threat discharges authorized by this General Order have a low threat to water quality. Because the discharges authorized by this General Order

are low volume and/or short-term in nature and are not expected to contribute to acute or chronic toxicity, effluent limitations for acute toxicity and acute and chronic WET testing is not required by this General Order.

#### **D. Receiving Water Monitoring**

##### **1. Surface Water**

- a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge on the receiving stream.
- b. Receiving water monitoring frequencies (monthly) and sample types (grab) for temperature, pH, electrical conductivity, and dissolved oxygen have been retained from Order R5-2008-0081 for discharges greater than 4 months in duration.
- c. Receiving water monitoring frequencies (twice weekly) and sample types (grab) for temperature, pH, electrical conductivity, and dissolved oxygen have been retained from Order R5-2008-0081 for discharges less than 4 months in duration.
- d. Consistent with Order R5-2008-0081, this General Order requires Dischargers to maintain a log of the receiving water conditions, giving attention to floating or suspended matter; discoloration; bottom deposits; aquatic life; visible films, sheens, or coatings; fungi, slimes, or objectionable growths; and potential nuisance conditions.

##### **2. Groundwater**

**[Not Applicable]**

#### **E. Other Monitoring Requirements**

1. **Post-Discharge Report.** Consistent with Order R5-2008-0081, this General Order requires Dischargers to submit a post-discharge report after each discharge.

### **VIII. RATIONALE FOR PROVISIONS**

#### **A. Standard Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42.

40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41(j)(5) and (k)(2) because the enforcement authority under the CWC is more stringent. In lieu of these conditions, this Order incorporates by reference CWC section 13387(e).

## **B. Special Provisions**

### **1. Reopener Provisions**

- a. The reopener provisions allow the Central Valley Water Board to reopen the permit in accordance with 40 CFR 122.62.
- b. **Total Residual Chlorine.** The State Water Board has developed the TRC/CPO draft policy, which, when adopted, is intended to establish consistent standards and implementation procedures for regulating chlorine statewide. This reopener allows the Central Valley Water Board to reopen the Order to include a revised reporting level to determine compliance with effluent limitations for total residual chlorine if a statewide policy for total residual chlorine is adopted during the term of this Order.

### **2. Special Studies and Additional Monitoring Requirements**

- a. **Pollution Prevention and Monitoring and Reporting Plan (PPMRP).** Water suppliers may have numerous intentional and unintentional releases of fresh water to surface waters and surface water drainage courses due to many factors, including system failures, pressure releases, and pipeline/tank flushing and dewatering. For the purposes of this General Order, these multiple discharges shall be considered a project. Water suppliers covered by this General Order may include irrigation districts, water districts, and water agencies. In lieu of the specific effluent and receiving water monitoring requirements included in the Monitoring and Reporting Program (Attachment E), water suppliers with more than one discharge point must develop and implement a PPMRP in accordance with the requirements of Attachment H.

### **3. Best Management Practices and Pollution Prevention**

- a. **Salinity.** The Central Valley Water Board, with cooperation of the State Water Board, has begun the process to develop a new policy for the regulation of salinity in the Central Valley. In a statement issued at the 16 March 2006, Central Valley Water Board meeting, Board Member Dr. Karl Longley recommended that the Central Valley Water Board continue to exercise its authority to regulate discharges of salt to minimize salinity increases within the Central Valley. Dr. Longley stated, “*The process of developing new salinity*

*control policies does not, therefore, mean that we should stop regulating salt discharges until a salinity Policy is developed. In the meantime, the Board should consider all possible interim approaches to continue controlling and regulating salts in a reasonable manner, and encourage all stakeholder groups that may be affected by the Regional Board's policy to actively participate in policy development."*

In order to address increasing salinity levels in receiving waters throughout the Central Valley Region of California, Dischargers enrolled under this General Order shall implement practices to minimize the discharge of salinity to the receiving water.

#### **4. Construction, Operation, and Maintenance Specifications**

**[Not Applicable]**

#### **5. Special Provisions for Municipal Facilities (POTWs Only)**

**[Not Applicable]**

#### **6. Other Special Provisions**

**[Not Applicable]**

#### **7. Compliance Schedules**

**[Not Applicable]**

### **IX. PUBLIC PARTICIPATION**

The Central Valley Water Board is considering the issuance of WDRs that will serve as a general NPDES permit for dewatering and other low threat discharges. As a step in the WDR adoption process, the Central Valley Water Board staff has developed tentative WDRs. The Central Valley Water Board encourages public participation in the WDR adoption process.

#### **A. Notification of Interested Parties**

The Central Valley Water Board has notified interested agencies, parties, and persons of its intent to prescribe general WDRs for dewatering and other low threat discharges and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided to interested parties through specific mailings, distribution through the Central Valley Water Board Lyrus Email System and through publication in major newspapers for the following communities: Bakersfield, Contra Costa County, Fresno, Redding and Sacramento.

## **B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Central Valley Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Central Valley Water Board, written comments must be received at the Central Valley Water Board offices by 5:00 p.m. on 8 April 2013.

## **C. Public Hearing**

The Central Valley Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: 31 May 2013  
Time: 9:00 a.m.  
Location: Regional Water Quality Control Board, Central Valley Region  
11020 Sun Center Dr., Suite #200  
Rancho Cordova, CA 95670

Interested persons are invited to attend. At the public hearing, the Central Valley Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is [www.waterboards.ca.gov/centralvalley](http://www.waterboards.ca.gov/centralvalley) where you can access the current agenda for changes in dates and locations.

## **D. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Board to review the decision of the Central Valley Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Central Valley Water Board's action to the following address:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

## **E. Information and Copying**

The tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Central Valley Water Board by calling (916) 464-3291.

## F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding this general WDRs and NPDES permit should contact the Central Valley Water Board, reference the general WDRs and NPDES permit, and provide a name, address, and phone number.

## G. Additional Information

Requests for additional information or questions regarding this Order should be directed to the following:

| County Discharge Located   | Staff Contact   |
|--|---|
| Amador, Colusa, El Dorado, Lake, Napa, Nevada, Placer, Sierra, Sutter, Yolo, Yuba, Alameda, Alpine, Calaveras, Contra Costa, Sacramento, San Joaquin, Solano, Stanislaus, Tuolumne | Joshua Palmer<br>(916) 464-4674<br>jpalmer@waterboards.ca.gov     |
| Lassen, Modoc, Shasta, Siskiyou, Butte, Glenn, Plumas, Tehama  | Greg Cash<br>(530) 224-3208<br>gcash@waterboards.ca.gov           |
| Fresno, Kern, Kings, Madera, Mariposa, Merced, San Benito, Tulare, Kern, Kings, and Tulare   | Matt Scroggins<br>(559) 445-6042<br>mscroggins@waterboards.ca.gov |

**ATTACHMENT G – NOTICE OF INTENT  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

**NOTICE OF INTENT**

**TO COMPLY WITH THE TERMS OF  
GENERAL ORDER NO. R5-2013-0074  
FOR  
DEWATERING AND OTHER LOW  
THREAT DISCHARGES TO SURFACE WATERS**

**A. CONTRACTOR/OPERATOR<sup>1</sup>**

|                                     |                                   |  |       |
|-------------------------------------|-----------------------------------|--|-------|
| Name                                |                                   |  |       |
| Mailing Address                     |                                   |  |       |
| City                                | State                             | ZIP  | Phone |
| Contact Person                      |                                   |  |       |
| <input type="checkbox"/> Contractor | <input type="checkbox"/> Operator | <input type="checkbox"/> Contractor/Operator |       |
| Signature: <sup>3</sup>             |                                   |  | Date: |

**B. PROPERTY OWNER<sup>2</sup>**

|                         |       |     |       |
|-------------------------|-------|-----|-------|
| Name                    |       |     |       |
| Mailing Address         |       |     |       |
| City                    | State | ZIP | Phone |
| Contact Person          |       |     |       |
| Signature: <sup>3</sup> |       |     | Date: |

**C. WATER SUPPLIERS (IF APPLICABLE)**

|                         |       |     |       |
|-------------------------|-------|-----|-------|
| Name                    |       |     |       |
| Mailing Address         |       |     |       |
| City                    | State | ZIP | Phone |
| Contact Person          |       |     |       |
| Signature: <sup>3</sup> |       |     | Date: |

**D. BILLING ADDRESS**

|                 |       |     |       |
|-----------------|-------|-----|-------|
| Name            |       |     |       |
| Mailing Address |       |     |       |
| City            | State | ZIP | Phone |
| Contact Person  |       |     |       |

<sup>1</sup> If additional owners/operators are involved, provide the information in a supplementary letter.

<sup>2</sup> If additional property owners are involved, provide the information in a supplementary letter.

<sup>3</sup> I hereby certify under penalty of perjury that the information provided in this application and in any attachments is true and accurate to the best of my knowledge. By signing this NOI, I agree to closely monitor and stop the discharge if there is any violation of the General Permit. The Central Valley Board will be immediately notified of any violation of the General permit.



### E. PROFESSIONAL ENGINEER

|   |                 |      |       |
|---|-----------------|------|-------|
| If a professional engineer has evaluated the existing or proposed discharge for compliance with this General Order, identify. |                 |      |       |
| Name  |                 |      |       |
| Mailing Address   |                 |      |       |
| City  | State           | ZIP  | Phone |
| Signature   | Certificate No. | Date |       |

### F. DISCHARGE LOCATION<sup>1</sup>

|   |
|---|
| Street (including address, if any)  |
| City/County   |
| Nearest Cross Street(s)   |
| Township/Range/Section T____, R____, Section____, MDB&M   |
| Attach a map of at least 1:24000 (1" = 2000') showing the discharge site (e.g. USGS 7 1/2' topographic map). The map should also show the treatment system, discharge point and surface waters. Wells and residences within 1,500 feet shall be identified. |

### G. DISCHARGE INFORMATION

|  |   |
|--|---|
| Identify type of discharge                               |   |
| <input type="checkbox"/> Well Development Water          | <input type="checkbox"/> Pipeline/Tank Pressure Testing                   |
| <input type="checkbox"/> Construction Dewatering         | <input type="checkbox"/> Pipeline/Tank Flushing or Dewatering             |
| <input type="checkbox"/> Pump/Well Testing               | <input type="checkbox"/> Condensate                                       |
| <input type="checkbox"/> Water Supply System             | <input type="checkbox"/> Other  |
| If other, please describe                                |   |
| If additives are in the discharge, describe and quantify |   |
| Start Date   | Stop Date (estimate)  |
| Discharge Rate (MGD)                                     | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |

### H. EVALUATION OF RECLAMATION OPTIONS

|   |                              |                             |
|---|------------------------------|-----------------------------|
| Provide an evaluation of reclamation options and justification for selecting a surface water disposal alternative. If no alternative disposal options are viable, explain why (attach additional sheet as necessary). If alternative disposal options are feasible, contact the Central Valley Water Board. This Order does not apply if there is no discharge to surface waters. |                              |                             |
| Is discharge to the local municipal wastewater treatment plant a viable option?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Is land disposal a viable option?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Is underground injection a viable option?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

<sup>1</sup> Water suppliers that have more than one existing or proposed discharge point are not required to complete this section. Dischargers other than water suppliers with more than one existing or proposed discharge point should provide the information in a supplementary letter.

## I. TREATMENT SYSTEM

|   |                               |                               |                                |
|---|-------------------------------|-------------------------------|--------------------------------|
| Identify type of treatment system   | <input type="checkbox"/> None | <input type="checkbox"/> Pond | <input type="checkbox"/> Other |
| <input type="checkbox"/> Provide narrative and schematic descriptions of the existing or proposed treatment system and engineering blueprints signed by a Registered Engineer or Geologist. If there is no treatment system, describe why treatment is not necessary. |                               |                               |                                |

## J. RECEIVING WATER INFORMATION

|                                    |
|------------------------------------|
| Name of receiving waterbody        |
| Name of major downstream waterbody |

## K. CATEGORICAL EXCEPTION FOR PRIORITY POLLUTANT CRITERIA/OBJECTIVES

|  |                              |                             |
|--|------------------------------|-----------------------------|
| Is the discharge necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code?            | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| If yes, the Discharger shall submit the following for the approval of the Executive Officer:   |                              |                             |
| <input type="checkbox"/> A detailed description of the proposed action, including the proposed method of completing the action.  |                              |                             |
| <input type="checkbox"/> A time schedule.  |                              |                             |
| <input type="checkbox"/> A discharge and receiving water quality monitoring plan (before project initiation, during the project, and after project completion, with the appropriate quality and quality control procedures). |                              |                             |
| <input type="checkbox"/> CEQA documentation.   |                              |                             |
| <input type="checkbox"/> Contingency plans.  |                              |                             |
| <input type="checkbox"/> Identification of alternate water supply (if needed).   |                              |                             |
| <input type="checkbox"/> Residual waste disposal plans.  |                              |                             |

## L. WASTEWATER SAMPLING

|   |
|---|
| <input type="checkbox"/> Provide the results of analysis of the existing or proposed effluent for pollutants listed in Attachment B. Dischargers applying for a categorical exception for meeting the priority pollutant criteria/objectives as authorized by section 5.3 of the SIP are not required to perform wastewater sampling for the priority pollutants contained in Attachment B. Dischargers of low volume discharges seeking an exception to the sampling requirements contained in Attachment B must submit justification that the existing or proposed discharge will have no significant adverse impact on water quality.                  |
| <input type="checkbox"/> Provide the results of analysis of the existing or proposed effluent for pollutants listed in Attachment C (if applicable).  |
| <input type="checkbox"/> Provide the results of analysis of the existing or proposed effluent and the upstream receiving water for hardness.  |
| <input type="checkbox"/> Provide the results of analysis of the existing or proposed effluent for pollutants causing impairment under the current CWA 303(d) List if discharging or proposing to discharge to an impaired surface water. The list of impaired surface waters can be found under the CWA Section 303(d) list at the web site:<br><a href="http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/impaired_waters_list/2008_2010_usepa_303dlist/20082010_usepa_aprvd_303dlist.pdf">http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/impaired_waters_list/2008_2010_usepa_303dlist/20082010_usepa_aprvd_303dlist.pdf</a> |
| <input type="checkbox"/> Provide the analytical data from the laboratory.   |

## M. POLLUTION PREVENTION AND MONITORING AND REPORTING PLAN

|  |
|--|
| <input type="checkbox"/> Water suppliers with more than one discharge point shall submit a Pollution Prevention and Monitoring and Reporting Plan which contains all of the elements identified in Attachment H. |
|--|

## N. FEE REQUIREMENTS

|  |
|--|
| <input type="checkbox"/> Provide the applicable fees. Information concerning the applicable fees can be found at <a href="http://www.waterboards.ca.gov/resources/fees/">http://www.waterboards.ca.gov/resources/fees/</a> . Checks must be made payable to the State Water Resources Control Board. |
|--|

## ATTACHMENT H – POLLUTION PREVENTION AND MONITORING AND REPORTING PLAN

Water suppliers that have or propose to have numerous discharge points covered by this General Order are required to develop a site specific Pollution Prevention and Monitoring and Reporting Plan (PPMRP) and submit the document with the Notice of Intent. The following information must be included in the PPMRP:

### I. POLLUTION PREVENTION PLAN

- A. Distribution System** – provide a description and a map of the distribution system including the boundaries of the geographical area where discharges may occur (e.g. service area).
- B. Potential Discharge Locations** – identify actual or approximate locations of fire hydrants, supply wells, pump stations, and pressure relief valves. Include a table and/or map of potential discharge locations.
- C. Pollutant Types** - identify the pollutants that could potentially be discharged (e.g. total suspended solids, settleable solids, chlorine, etc.).
- D. Flow Rate Ranges** - identify the expected instantaneous discharge flow rates and/or total daily flow volume.
- E. Receiving Waters** - identify the receiving water (e.g., drainage canal, creek, or river) the discharges could directly enter and the nearest named receiving water.
- F. Treatment Systems** – identify treatment systems, equipment, or procedures used to remove chlorine and solids from discharges and to control pH.
- G. Spill Contingency Plans** – address unintentional releases/discharges of water (whether chlorinated or dechlorinated) such as water discharges from breaks in the system (including, but not limited to: fire hydrant, back-flow preventers, and pumps). A discharge from a water main pressure relief valve that is beyond the typical volume discharged from a well-maintained pressure relief valve is considered a spill. In addition, include plans for the capture and containment of the released volume, dechlorination of released volume, temporary procedures to stop the unintentional discharge until a permanent repair, and permanent repair of water system components that fail.
- H. Operation and Maintenance Procedures (O&M)** – include procedures that would prevent unintentional releases, such as pressure relief valve maintenance, planned water main replacement, water main corrosion prevention, and pump station maintenance, power supply maintenance. O&M procedures also include those procedures to prevent discharges of other pollutants (such as chlorine and dechlorinating agents during an intentional or unintentional release of water and in the course of water system construction, repair and maintenance).

- I. Inspections** – include a plan for regularly scheduled inspections to check the integrity of water supply system components (pumps, pressure relief valves, water pipes and connections, etc.) to prevent unintentional and accidental discharges of water (chlorinated or dechlorinated).
- J. Equipment/Supplies** – identify equipment and supplies that are needed to 1) properly operate and maintain a water supply system to prevent unintentional discharges; 2) dechlorinate, contain and control intentional discharges; 3) prevent discharge of other pollutants (chlorine, dechlorinating agents, sediment, etc.) during intentional and unintentional discharges and during water supply system construction, repair and maintenance; and 4) quickly and effectively respond to dechlorinate, contain and control unintentional discharges.
- K. Training** – identify training activities to 1) ensure staff are adequately prepared to properly operate and maintain a water supply system to prevent unintentional discharges; 2) dechlorinate, contain and control intentional discharges; 3) prevent discharge of other pollutants (chlorine, dechlorinating agents, sediment, etc.) during intentional and unintentional discharges and during water supply system construction, repair and maintenance; and 4) quickly and effectively respond to dechlorinate, contain and control unintentional discharges.
- L. Erosion Control** – identify equipment and supplies that are needed to control and contain intentional and unintentional discharges of water to prevent erosion of soil and sediment which can be transported with the discharge.

## II. MONITORING AND REPORTING PROGRAM

Develop a representative sampling and analysis program. Dischargers are not required to sample all discharges if reasonable assurance is provided that the discharges will comply with requirements. Provide rationale for selection of the effluent and receiving water monitoring plan. The sampling and analysis program shall include the following:

- A. Sampling Methods** – include a description of how effluent and receiving water samples will be collected (e.g. grab, composite, continuous, metered, totalizer) and preserved/delivered within the holding time to the analytical laboratory.
- B. Sampling Locations** – identify effluent sampling locations (e.g., at each well or fire hydrant, or at a subset of well or fire hydrant locations) and where samples will be taken (e.g., from fire hydrant, 10 feet from source, at effluent of settling basin).  
  
In addition, identify all receiving water locations where samples can be taken and describe where at those locations samples will be taken (e.g. 10 feet upstream and downstream of storm drain outfall into the drainage channel).
- C. Sampling Frequency** – identify the frequency that effluent and receiving water samples will be taken (e.g., during each discharge, every fourth discharge, each well discharge). In addition, specify when during a discharge the receiving water samples will be collected (consider time within the storm drain system).

- D. Analysis Methods** – identify the constituents/parameters that will be monitored and/or analyzed and the method of analysis (e.g. meter EPA method, instrument, laboratory). In addition, identify Quality Assurance/Quality Control procedures, including instrument calibration.
- E. Inspection plans and visual observations** – describe how receiving waters will be inspected to obtain and record visual observations for discoloration, stream bottom deposits, etc.
- F. Rationale** – explain the reason for the effluent and receiving water sampling methods, locations, and frequencies that were chosen and why these will provide representative samples. For example, if a sample will not be taken at the identified locations during each discharge, describe criteria for deciding when a sample will be taken at that location.

The sampling and analysis program must be developed and implemented in accordance with the General Monitoring Provisions, Other Monitoring Requirements, and Reporting Requirements contained in sections I, IX, and X, respectively, of the Monitoring and Reporting Program (Attachment E).

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

**RESOLUTION R5-2013-0145**

**APPROVING  
WAIVER OF REPORTS OF WASTE DISCHARGE AND  
WASTE DISCHARGE REQUIREMENTS  
FOR SPECIFIC TYPES OF DISCHARGE  
WITHIN THE  
CENTRAL VALLEY REGION**

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board or Board) finds that:

1. Water Code section 13260(a) requires that any person currently discharging or proposing to discharge waste that could affect the quality of the waters of the State (other than into a community sewer system) file a Report of Waste Discharge (RWD) with the appropriate Regional Water Quality Control Board that contains such information and data as may be required.
2. Pursuant to Water Code section 13263, the Central Valley Water Board has the obligation to prescribe waste discharge requirements (WDRs) for waste discharges, except where the Central Valley Water Board finds that waiving this requirement for a specific type of discharge is not against the public interest pursuant to Water Code section 13269.
3. Water Code sections 13260(b) and 13269 authorize the Central Valley Water Board to waive WDRs and RWDs, respectively, for specific types of discharge where such a waiver is not against the public interest, is conditional, and may be terminated by the Board at any time.
4. In 1999, Water Code section 13269 was amended by the California Legislature. Following these amendments, waivers automatically expire after five years, unless the Board that issued the waiver reviews the terms of the waiver at a public hearing and determines that the waiver is consistent with any applicable state or regional water quality control plan and is in the public interest.
5. In December 2008, the Central Valley Water Board adopted Resolution R5-2008-0182 (*Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge Within the Central Valley Region*), which renewed the General Waiver (i.e., Resolution R5-2003-0008), which had been in effect for five years. Resolution R5-2008-0182 waived WDRs, and in some cases RWDs, for 12 specific types of discharges to land.
6. The Central Valley Water Board, in compliance with the Water Code, has reviewed the previously-issued waivers set forth in Resolution R5-2008-0182 and has determined that waivers for the following types of discharges to land pose a low threat to the quality of

WAIVER OF RWD AND WDRS FOR SPECIFIC TYPES OF DISCHARGE  
WITHIN THE CENTRAL VALLEY REGION

waters of the State and are consistent with all applicable state or regional water quality control plans, and thus should be renewed:

- a. Conditional waiver of WDRs or Water Recycling Requirements (WRRs), but not the requirement to submit RWDs, for:
  - Disposal of dredge material to land,
  - Water recycling for construction purposes and road dust control, and
  - Small, short-term sand and gravel operations.

- b. Conditional waiver of WDRs and in some instances the requirement to submit RWDs, for:

- Air conditioner, cooling, and elevated temperature waters,
- Fresh water well drilling muds/boring wastes,
- Inert solid waste disposal,
- Test pumping of fresh water wells,
- Swimming pool discharges,
- Construction dewatering discharges,
- Hydrostatic testing,
- Agricultural commodity wastes, and
- Disposal of residual waste to land as a soil amendment.

7. In 2003, the State Water Resources Control Board (State Water Board) adopted Statewide General Order 2003-0003-DWQ for "low-threat" discharges to land. This Statewide General Order was adopted to handle those types of discharges that posed a low threat to water quality, but was not intended to supersede the authority of the Regional Water Quality Control Boards to issue individual WDRs or conditional waivers.
8. A review of the Statewide General Order shows that several categories covered by the Order are nearly identical to those covered by Resolution R5-2013-0145. For those categories that are also covered by the Statewide General Order, the waiver only applies to those discharges that represent the very lowest threat to water quality. As a result, categories for discharges of drilling muds/boring wastes, inert solid waste disposal, test pumping of fresh water wells, swimming pool discharges, construction dewatering discharges, and hydrostatic testing, are restricted to those instances which represent the lowest threat to water quality.
9. Waiver of WDRs for discharges from projects requiring Water Quality Certification was dropped from the General Waiver in 2008 since discharges from dredge and fill activities would be best regulated under Statewide General Order 2003-017-DWQ for "Jurisdictional" waters and Statewide General Order 2004-0004-DWQ for "Non-jurisdictional" waters.

WAIVER OF RWD AND WDRS FOR SPECIFIC TYPES OF DISCHARGE  
WITHIN THE CENTRAL VALLEY REGION

10. The Central Valley Water Board reviewed the conditions for the drilling muds/boring wastes waiver category (Waiver Category No. 2), which applied to drilling muds/boring wastes from both fresh water supply wells and oil and gas operations. The Central Valley Water Board considered impacts to water quality based on increases in oil and gas drilling in the Central Valley Region over the last five years, advances in oil and gas drilling technologies (e.g., horizontal drilling and well stimulation activities), and increases in the drilling for oil and gas outside of existing oil and gas fields and determined that Waiver Category No. 2 should be renewed only for the drilling of fresh water supply wells. Discharge of drilling muds/boring wastes from oil and gas operations will be considered in a separate action to determine whether or not a waiver of RWDs and/or WDRs is appropriate.
11. The Board's waiver of the requirement to file RWDs and the Board's waiver of WDRs for discharges that will cause no or insignificant impairment to water quality and that pose little risk of creating a nuisance condition is not against the public interest, as these actions reduce the cost of activities that produce innocuous or small amounts of waste, are protective of the environment, and allow Central Valley Water Board staff to direct resources towards addressing waste discharges that have significant potential to degrade water quality or create nuisance conditions.
12. The waiver of RWDs under a discharge category does not preclude the Executive Officer from requesting a RWD for a specific project if it is necessary to perform an evaluation of the discharge.
13. The waiver of WDRs and, in some instances, RWDs for discharge categories covered under the General Waiver for low threat discharges to land, were previously waived under Resolution 82-036. As lead agency under the California Environmental Quality Act (Pub. Resources Code, section 21000 et seq.) (CEQA), the Central Valley Water Board determined that adoption of Resolution 82-036 waiving WDRs for 23 specific discharges to land would not cause a significant environmental impact and, on 23 December 1981, adopted a Negative Declaration. Pursuant to California Code of Regulations, title 14, section 15162, a subsequent environmental impact report or negative declaration is not required.
14. The conditional waiver is consistent with State Water Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality of Waters in California, because the waiver of WDRs imposes conditions to prevent impacts to water quality and authorizes no degradation of water quality, will not unreasonably affect beneficial uses of water, and will not result in water quality less than that prescribed in plans and policies.
15. The Central Valley Water Board conducted a public hearing on 5 December 2013 in Rancho Cordova, California, and considered all testimony and evidence concerning this matter.



WAIVER OF RWD AND WDRS FOR SPECIFIC TYPES OF DISCHARGE  
WITHIN THE CENTRAL VALLEY REGION

**THEREFORE BE IT RESOLVED**, that in accordance with Water Code section 13269, the Central Valley Water Board adopts the "*Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge*" as set forth in Attachment A, hereafter informally referred to as the "General Waiver," and that;

1. The Central Valley Water Board waives the requirement to obtain WDRs and/or WRRs, and for some instances the requirement to submit a RWD and filing fee, for discharge types that fulfill the conditions set forth in Attachment A of this Order.
2. Discharges that result from emergency work or emergency projects as described under Water Code section 13269(c) are not affected by this action.
3. Discharge of wastes to wetlands, surface waters, drainage courses, or biologically sensitive areas, is prohibited.
4. Based on the testimony received at the aforementioned hearing, and the above-noted findings, the General Waiver is not against the public interest provided dischargers subject to such waiver:
  - (a) comply with the conditions for waiver of waste discharge requirements as set forth in the General Waiver;
  - (b) file with the Central Valley Water Board a Report of Waste Discharge and filing fee when required as part of the General Waiver; and
  - (c) comply with applicable State and Central Valley Water Board plans and policies.
5. For those discharges requiring submittal of a RWD, the discharger must submit the fee specified in California Code of Regulations, title 23, section 2200, for a threat to water quality and complexity of "3C".
6. Based on the above-noted findings, it is not necessary at this time to adopt individual or general waste discharge requirements for the discharge of wastes related to the types of discharges identified in Attachment A and that are conducted in accordance with the conditions specified in the General Waiver as these types of discharges are considered to be of low threat to water quality and Central Valley Water Board resources should focus on higher threat discharges.
7. For the seven categories in the General Waiver that are also covered by Statewide General Order 2003-0003-DWQ for low threat discharges to land, this waiver shall only apply to those discharges that are of such good quality and of limited volume/duration that coverage under the Statewide General Order for low threat discharges is not necessary. Specifically:

WAIVER OF RWD AND WDRS FOR SPECIFIC TYPES OF DISCHARGE  
WITHIN THE CENTRAL VALLEY REGION

- Non-contact cooling water discharges;
  - Fresh water well drilling muds/boring wastes;
  - Inert solid waste disposal;
  - Test pumping of fresh water wells;
  - Swimming pool discharges;
  - Construction dewatering discharges; and
  - Hydrostatic testing.
8. The discharge of any waste not specifically regulated by the General Waiver is prohibited unless the discharger complies with Water Code section 13260(a) and the Central Valley Water Board either issues WDRs pursuant to Water Code section 13263 or an individual waiver pursuant to Water Code section 13269, or the time frames specified in Water Code section 13264(a) have elapsed.
  9. This General Waiver shall not create a vested right to discharge. All discharges authorized under this General Waiver shall be considered a privilege, as provided for in Water Code section 13263.
  10. Pursuant to Water Code section 13269, this action waiving the issuance of WDRs for certain specific types of discharges: (a) is conditional, (b) may be terminated at any time, (c) does not permit an illegal activity, (d) does not preclude the need for permits which may be required by other local or governmental agencies, and (e) does not preclude the Central Valley Water Board from administering enforcement remedies (including civil liability) pursuant to the Water Code.
  11. The Executive Officer or Central Valley Water Board may terminate the applicability of the General Waiver described herein as to any type of discharge or individual discharger at any time when such termination is in the public interest or the activity could affect the quality or beneficial uses of the waters of the State.
  12. The Central Valley Water Board may review the General Waiver at any time and may modify or terminate the General Waiver in its entirety, as applicable for a specific type of discharge, or for individual dischargers, as is appropriate.
  13. This General Waiver shall expire on 5 December 2018, unless terminated or renewed by the Central Valley Water Board.

If any person discharging a waste that falls within the scope of the waiver fails to comply with the conditions of the waiver, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with the conditions of the waiver may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The

WAIVER OF RWD AND WDRS FOR SPECIFIC TYPES OF DISCHARGE  
WITHIN THE CENTRAL VALLEY REGION

Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on 5 December 2013.



PAMELA C. CREEDON, Executive Officer

Order Attachments:

- A. Specific Discharges Covered by the General Waiver
- B. Staff Report

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

**ATTACHMENT A  
CONDITIONS OF DISCHARGE**

**RESOLUTION R5-2013-0145  
WAIVER OF REPORTS OF WASTE DISCHARGE AND WASTE DISCHARGE  
REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE  
WITHIN THE CENTRAL VALLEY REGION**

Each person who discharges a waste type identified herein that is of very low complexity and very low threat to water quality and who meets the conditions specified herein for that type of discharge need not obtain waste discharge requirements (WDRs) and may commence discharge forthwith of that waste type, provided:

1. The Discharger first submits, if requested by the Executive Officer or if specified below for the discharge type or situation, a filing fee and Report of Waste Discharge (RWDs) that documents that the discharge will comply with the conditions of waiver, and obtains written approval of waiver from the Executive Officer.
2. For discharge types covered by Statewide General Order 2003-0003-DWQ for low threat discharges to land, the Discharger must provide information that demonstrates that the discharge is of such low-threat/duration that waiver of WDRs and RWDs is appropriate. Specifically: (a) evaporative cooling water discharges; (b) drilling muds/boring waste discharges; (c) inert solid waste disposal; (d) test pumping of fresh water wells; (e) swimming pool discharges; (f) construction dewatering discharges; and (g) hydrostatic testing.
3. The Discharger complies with the conditions in this document specific to the type of discharge and with the following general provisions:
  - a. The discharge shall neither create nor threaten to create a condition of nuisance, as defined by Water Code section 13050.
  - b. The discharge shall neither degrade the quality of waters of the State nor create or threaten to create a condition of pollution or contamination as defined by Water Code section 13050.
  - c. The discharge shall not contain hazardous wastes, as that term is defined in California Code of Regulations, title 22 (Title 22), section 66261.1 et seq.
  - d. The discharge of any waste not specifically regulated by this waiver and that could affect the quality of the waters of the state is prohibited, unless the discharger obtains regulatory coverage under separate WDRs or certification issued by the Central Valley Water Board or the State Water Resources Control Board.
  - e. The discharger shall allow Central Valley Water Board staff reasonable access onto the affected property for the purpose of performing inspections to determine compliance with waiver conditions.

- f. Field test instruments (such as Electrical Conductivity meters) may be used provided that the operator is trained in the proper use of the instrument and each instrument is serviced and/or calibrated at the recommended frequency by the manufacturer or in accordance with manufacturer instructions.
- g. The discharger shall submit technical and monitoring reports as specified by the Executive Officer and consistent with Water Code section 13267.
- h. Discharge of waste to wetlands, surface waters, drainage courses, or biologically sensitive areas is prohibited.
- i. The discharger shall comply with all federal, state, county, and local laws and regulations pertaining to the discharge.
- j. It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce its activity in order to maintain compliance with conditions of waiver.
- k. This waiver expires on 5 December 2018. A discharger of waste subject to a RWD shall submit a new RWD and filing fee before then for consideration of renewal of the waiver, or cease discharge.

| Type of Waste Discharge  | RWD and Filing Fee Required <sup>1</sup>        | Conditions  |
|--|---|---|
| 1. Air Conditioner, Cooling and Elevated Temperature Waters <sup>3</sup> | <b>Contact Cooling Water-Yes</b>                | <ul style="list-style-type: none"> <li>Waste constituent concentrations comparable to uppermost underlying groundwater (e.g., Electrical Conductivity [EC] less than 500 µmhos/cm over source water).</li> <li>Biochemical oxygen demand (BOD) must be consistently less than 30 mg/L without treatment and, if impounded, must be less than 10 lb/acre/day.</li> <li>If additives are used, provide the Material Safety Data Sheets (MSDS) and include an analysis for metals in the RWD, especially if metal-containing algaecides are used.</li> </ul> |
|  | <b>Non-Contact Cooling Water-Yes</b>            | <ul style="list-style-type: none"> <li>Waste constituent concentrations comparable to underlying groundwater (e.g., EC less than 500 µmhos/cm over source water).</li> <li>If additives are used, provide the appropriate MSDS and include an analysis for metals in the RWD, especially if metal-containing algaecides are used.</li> </ul>  |
|  | <b>Non-Contact Cooling Water-No<sup>2</sup></b> | <ul style="list-style-type: none"> <li>Waste constituent concentrations comparable to underlying groundwater (e.g., EC less than 500 µmhos/cm over source water).</li> <li>Discharge is of good quality (e.g., no additives, including metal-containing algaecides).</li> <li>One time or limited seasonal discharge.</li> </ul>  |

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WAVIER OF RWD AND WDRS FOR SPECIFIC TYPES OF DISCHARGE  
WITHIN THE CENTRAL VALLEY REGION

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| Type of Waste Discharge                                      | RWD and Filing Fee Required <sup>1</sup> | Conditions  |
|--|--|---|
| 2. Fresh Water Well Drilling Muds/Boring Wastes <sup>3</sup> | No <sup>2</sup>                          | <ul style="list-style-type: none"> <li>• Drilling operations are in uncontaminated soils.</li> <li>• Drilling mud must be non-hazardous and contain no halogenated solvents.</li> <li>• Prior to burial, drilling muds must first be dried then the site restored to pre-sump conditions and covered with at least one foot of clean compacted soil.</li> <li>• Sump must be greater than 100 feet from nearest surface water and bottom of the sump must be at least 5 feet above the highest anticipated groundwater level.</li> </ul>  |
| 3. Disposal of Dredge Material to Land                       | Yes                                      | <ul style="list-style-type: none"> <li>• If the dredged material may contain constituents that are potentially hazardous or at concentrations that could impair beneficial uses of receiving water, the discharger must provide a chemical analysis of the fine (silt and clay) portion of the substrate material and a written waste management plan (WMP) describing Best Management Practices (BMPs) which will be employed to prevent excess erosion and prevent runoff from the emplaced sediments.</li> <li>• Excludes disposal of dredge material from mining operations.</li> </ul>       |
| 4. Inert Solid Waste Disposal <sup>3</sup>                   | No <sup>2</sup>                          | <ul style="list-style-type: none"> <li>• Short-term or one time disposal of no more than a few months.</li> <li>• Wastes must be insoluble, without decomposable solids, and contain no "free liquids".</li> <li>• The site must be well constructed, managed to restrict access, and outside of natural or man-made drainage courses.</li> <li>• Excludes tires, semi-solid wastes, dewatered sludge, liquid wastes, ash, fresh concrete solids, and any waste deemed by the Executive Officer to have the potential to degrade groundwater, even if classified as inert by Title 27.</li> </ul> |

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WAVIER OF RWD AND WDRS FOR SPECIFIC TYPES OF DISCHARGE  
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| Type of Waste Discharge                              | RWD and Filing Fee Required <sup>1</sup> | Conditions  |
|--|--|---|
| 5. Test Pumping of Fresh Water Wells <sup>3</sup>    | No <sup>2</sup>                          | <ul style="list-style-type: none"> <li>• One time discharge from testing or development of individual domestic or irrigation supply well or periodic discharge of purge water from a monitoring well as part of compliance monitoring program.</li> <li>• Discharge remains on the property where the test is being conducted, unless there is a signed use agreement.</li> <li>• Discharge shall not be conducted in a manner such as to cause nuisance conditions or threaten surface waters.</li> <li>• Excludes discharge from wells associated with a cleanup or remediation project unless conducted under an approved cleanup or remediation management plan.</li> </ul> |
| 6. Swimming Pool Discharges <sup>3</sup>             | No <sup>2</sup>                          | <ul style="list-style-type: none"> <li>• Infrequent (e.g., once every three years)</li> <li>• Single pool</li> </ul>  |
| 7. Construction – Dewatering Discharges <sup>3</sup> | No <sup>2</sup>                          | <ul style="list-style-type: none"> <li>• Limited volume and duration of no more than a few weeks.</li> <li>• The impoundment or use area must pose low risk of nuisance and the water must infiltrate/evaporate within 72 hours.</li> </ul>   |
| 8. Hydrostatic Testing <sup>3</sup>                  | Yes                                      | <ul style="list-style-type: none"> <li>• Limited volume and duration of no more than a few weeks.</li> <li>• Provide data to demonstrate that all residual pollutants have been removed or are below water quality objectives.</li> <li>• The impoundment or use area must pose low risk of nuisance and the water must infiltrate/evaporate within 72 hours.</li> </ul>  |
|  | No <sup>2</sup>                          | <ul style="list-style-type: none"> <li>• Testing on existing lines or tanks used for potable water only or new lines or tanks that have only ever contained potable water.</li> </ul>   |

| Type of Waste Discharge   | RWD and Filing Fee Required <sup>1</sup>  | Conditions   |
|---|---|--|
| 9. Agricultural Commodity Wastes                                    | <p><b>Recurring Discharge- Yes</b></p> <p><b>One-time Discharge- No<sup>2</sup></b></p> | <ul style="list-style-type: none"> <li>• An "agricultural commodity waste" is an unprocessed product excepting livestock, poultry, and fish that becomes a waste as a result of culling, spoilage, or contamination.</li> <li>• BMPs are employed to preclude the potential for nuisance conditions.</li> <li>• Wastes must not be discharged in close proximity to buildings occupied by people.</li> <li>• Excludes discharge of processed food or processed food residuals (e.g., whey), dead animals, or animal byproducts.</li> </ul> |
| 10. Disposal of Residual Waste to Land as a Soil Amendment          | <b>No<sup>2</sup></b>   | <ul style="list-style-type: none"> <li>• The discharge is enrolled under an approved County Program.</li> </ul>  |
| 11. Water Recycling for Construction Projects and Road Dust Control | <b>Yes</b>  | <ul style="list-style-type: none"> <li>• Recycled water must be treated to Title 22 standards by permitted recycled water producer.</li> <li>• User must certify that the discharge will conform with Title 22 restrictions and Department of Public Health Guidelines and that the use has been approved by local and State health departments.</li> </ul>  |
| 12. Projects Requiring Water Quality Certification                  |   | <ul style="list-style-type: none"> <li>• Not renewed</li> </ul>  |
| 13. Small, Short-Term Sand and Gravel Operations                    | <b>Yes</b>  | <ul style="list-style-type: none"> <li>• BMPs are employed to prevent excessive erosion or runoff conditions.</li> <li>• Impoundment or use area must pose low risk of nuisance.</li> <li>• All wash waters are confined to land.</li> <li>• Excludes sand and gravel operations in stream channels or drainage courses that have the potential to discharge to surface waters.</li> </ul>   |



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- 1 Does not preclude the Executive Officer from requesting a RWD for a specific project as necessary to perform an evaluation of the discharge.
- 2 Applicant should contact staff regarding applicability of the discharge meeting the conditions of the waiver without need for a RWD.
- 3 Covered by Statewide General Order No. 2003-0003-DWQ for low threat discharges to land. For those categories that are covered by both, the waiver should only apply to those discharges that represent the very lowest threat to water quality.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY WATER BOARD**

**STAFF REPORT**

**RESOLUTION R5-2013-0145  
WAIVER OF REPORTS OF WASTE DISCHARGE AND WASTE DISCHARGE  
REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE  
WITHIN THE CENTRAL VALLEY REGION**

**INTRODUCTION**

Water Code section 13263 requires that the Regional Water Boards prescribe discharge requirements for discharges of waste that may affect waters of the State. The effect of some of these discharges, by virtue of waste constituent, constituent concentration, and constituent control, however, can be mitigated to have little or no effect on the quality and beneficial uses of waters of the State. Due to limited resources it is in the best interest of the public and the Central Valley Water Board not to expend the Board's finite resources on regulating low-risk discharges that, when designed and operated to meet pre-set conditions, will have an insignificant potential to affect water quality or create nuisance. Water Code section 13269 authorizes the Regional Water Boards to waive waste discharge requirements (WDRs), or to waive the requirement to submit a report of waste discharge (RWDs).

Previously, the Central Valley Water Board waived WDRs and RWDs for Emergency Use of Treated Wastewater as set forth in Central Valley Water Board Resolution 77-69 and for 23 types of discharges to land that posed a low-threat to water quality as set forth in Central Valley Water Board Resolution 82-036. California State Senate Bill 390 amended the Water Code, causing all existing waivers to expire as of 1 January 2003, and required the periodic review and renewal of any new waivers at least once every five years.

In December 2008, the Central Valley Water Board adopted Resolution R5-2008-0182 (*Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge Within the Central Valley Region*), which renewed the General Waiver (i.e., Resolution R5-2003-0008), which had been in effect for five years. Resolution R5-2008-0182 waived WDRs, and in some cases RWDs, for 12 specific types of discharges to land. Specifically, Resolution R5-2003-0008 waived Water Recycling Requirements (WRRs) for use of recycled water for construction and road dust control and WDRs and in some cases RWDs for 11 of the 23 discharge types covered under Resolution 82-036. The remaining discharge categories authorized under Resolution 82-036 were not renewed. Specific discharges covered under Resolution R5-2003-0008 were:

1. Air Conditioner, Cooling and Elevated Temperature Waters
2. Drilling Muds/Boring Wastes
3. Disposal of Dredge Material to Land
4. Inert Solid Waste Disposal
5. Test Pumping of Fresh Water Wells
6. Swimming Pool Discharges
7. Construction – Dewatering Operations

8. Hydrostatic Testing
9. Agricultural Commodity Wastes
10. Disposal of Residual Waste to Land as a Soil Amendment
11. Water Recycled for Construction Projects and Road Dust Control
12. Projects Requiring Water Quality Certification (Not Renewed)
13. Small, Short-Term Sand and Gravel Operations

## **STATEWIDE GENERAL ORDER**

In 2003 the State Water Resources Control Board adopted Statewide General Order 2003-0003-DWQ (Statewide General Order) for low-threat discharges to land. With the expiration of all waivers on 1 January 2003, many Regions did not have a mechanism in place to regulate low-threat discharges. General Order 2003-0003-DWQ was adopted to cover discharges that had been previously covered under such waivers. It was not intended to supersede individual WDRs, general orders, or conditional waivers issued by the Regional Water Boards. The State Water Board did not find that categories covered by the General Order were not still appropriate for waiver.

Several of the categories covered under the Statewide General Order for low threat discharges to land are nearly identical to those included in the Resolution R5-2003-0008. Specifically:

- Water Well Development Discharge (Waiver Category 5);
- Monitoring Well Purge Water Discharge (Waiver Category 5);
- Boring Waste Discharge (Waiver Category 2);
- Water Main, Storage Tank, and Hydrant Flushing Discharges (Waiver Category 8);
- Pipelines and Tank Hydrostatic Testing Discharges (Waiver Category 8);
- Swimming Pool and Landscape Drainage Discharges (Waiver Category 6);
- Small Temporary Dewatering Projects (Waiver Category 7);
- Small Inert Solid Waste Disposal Operations (Waiver Category 4); and
- Small Volume Evaporative Cooling Water Discharge (Waiver Category 1).

The Statewide General Order for low threat discharges to land prohibits discharge to surface waters, discharge of hazardous or designated waste, and discharges that cause pollution. The Order specifies that discharges shall not exceed applicable Basin Plan water quality objectives, freeboard in ponds shall be at least two feet, and facilities shall be protected from erosion/flooding and also contains individual provisions specific to some of the categories, which are discussed below.

## **DISCUSSION**

The Central Valley Water Board, in compliance with Water Code section 13269, reviewed the previously-issued General Waiver adopted in 2008 to determine if the waivers for specific types of discharges that pose a low threat to the quality of waters of the State should be

renewed. Based on that review, waiver of WDRs and, in some cases, RWDs for the following specific discharge types are proposed:

Discharge Categories:

| No. | Category   | Renewed |
|-----|--|---------|
| 1.  | Air Conditioner, Cooling, and Elevated Temperature Waters*                               | Yes     |
| 2.  | Fresh Water Well Drilling Muds / Boring Wastes *   | Yes     |
| 3.  | Disposal of Dredge Material to Land  | Yes     |
| 4.  | Inert Solid Waste Disposal *   | Yes     |
| 5.  | Test Pumping of Fresh Water Wells *  | Yes     |
| 6.  | Swimming Pool Discharges *   | Yes     |
| 7.  | Construction—Dewatering Discharges   | Yes     |
| 8.  | Hydrostatic Testing *  | Yes     |
| 9.  | Agricultural Commodity Wastes  | Yes     |
| 10. | Disposal of Residual Wastes to Land as a Soil Amendment (previously "Industrial" Wastes) | Yes     |
| 11. | Water Recycling for Construction Projects and Road Dust Control                          | Yes     |
| 12. | Projects Requiring Water Quality Certification issued by the Regional Water Board        | No      |
| 13. | Small, Short-Term Sand and Gravel Operations   | Yes     |

\* Categories also covered by Statewide General Order 2003-0003-DWQ, but for which the waiver category was retained for those discharges that represent the lowest threat to water quality.

## WAIVER CATEGORIES

The following describes each discharge category. Under the proposed waiver conditions, none of the discharge categories represent a significant source of groundwater degradation or potential nuisance.

For those categories that are also covered by the Statewide General Order for low threat discharges to land, the waiver should only apply to those discharges that represent the very

lowest threat to water quality, and in those cases, the waiver should be for both WDRs and RWDs.

## **1. Air Conditioner, Cooling, and Elevated Temperature Waters**

Wastewater generated from air conditioning, cooling, ice making, or refrigeration systems are collectively referred to as cooling water, which includes contact and non-contact cooling waters. Non-contact cooling water refers to cooling water which does not come in contact with any raw material, intermediate product, waste product, or finished product. Additives, such as metal-containing algaecide, are often used in both contact and non-contact cooling water to control algae growth.

For the discharge to land of contact cooling water, the waiver of WDRs (but not RWDs) should be continued, provided that:

- Waste constituent concentrations comparable to uppermost underlying groundwater (e.g., Electrical Conductivity [EC] less than or equal to 500  $\mu$ mhos/cm over source water);
- Biological Oxygen Demand (BOD) must be consistently less than 30 mg/L without treatment and, if impounded, must be less than 10 lb/acre/day; and
- If additives are used, provide the Material Safety Data Sheets (MSDSs) and include an analysis for metals in the RWD, especially if metal-containing algaecides are used.

The waiver of WDRs (but not RWDs) for the discharge to land of non-contact cooling water should be renewed provided that:

- Waste constituent concentrations must be comparable to uppermost underlying groundwater (e.g., EC less than or equal to 500  $\mu$ mhos/cm over source water); and
- If additives are used, provide MSDS and include an analysis for metals in the RWD, especially if metal-containing algaecide are used.

The need for a RWD should also be waived for non-cooling water discharges provided that are of good quality (e.g., no additives including metal-containing algaecides) and are of limited volume/duration (e.g., one time or limited seasonal discharges). Non-contact cooling water discharges may also be covered under Statewide General Order for low threat discharges to land; however, it does not contain any specific requirements for this category.

## **2. Fresh Water Well Drilling Muds/Boring Wastes**

Drilling muds and boring wastes are generated during drilling as part of a subsurface investigation or well drilling operation to carry cuttings to the surface and cool the drill bit. Drilling muds consist of formation cuttings, water, and may include additives. Common additives include bentonite clay to increase viscosity and stabilize the borehole, and barite to

control the flow of formation fluids into the borehole. The soil and rock cuttings from the borings, along with some drilling mud, are commonly discharged to an excavated sump adjacent to the drill rig, or sometimes to a portable tank.

Fresh water well drilling activities are generally regulated by local agencies such as cities or counties and typically do not require oversight by the Regional Water Board. Drilling muds/boring wastes from the drilling of fresh water supply wells in general do not pose the same threat as drilling muds/boring wastes from oil and gas drilling. The conditions set forth in the General Waiver adopted in 2008 are currently sufficient to be protective of water quality for fresh water well drilling muds but may not be sufficient for drilling muds from oil and gas wells. The waiver of drilling muds/boring wastes from oil and gas drilling are not proposed to be renewed under the proposed General Wavier and will be considered in a separate Board action.

The waiver of WDRs and RWDs for disposal of drilling muds/boring wastes from fresh water well drilling operations should be renewed provided that:

- The drilling operations are conducted in uncontaminated soils;
- The discharge is "non-hazardous" and does not contain halogenated solvents;
- Prior to burial, drilling muds must first be dried then the site restored to pre-sump conditions and covered with at least one foot of clean soil; and
- Sump must be greater than 100 feet from nearest surface water and bottom of the sump must be at least 5 feet above highest anticipated groundwater level.

Fresh water well drilling operations that cannot meet the conditions for the waiver should be regulated under a General Order or an individual waiver or WDRs. The Statewide General Order for low threat discharges to land is another potential option for coverage by WDRs if a discharge of drilling muds does not meet the conditions of the General Waiver.

### **3. Disposal of Dredge Material to Land**

This category covers discharge of dredge material to land from small scale dredging projects such as bridge replacement and construction projects where pilings and abutments must be placed in a stream channel or to restore or increase storage capacity in water storage reservoirs. Minor dredging operations are generally of short duration and disposal of dredge material to land in a controlled manner poses little threat to groundwater quality if essentially free of contaminants that have a potential to cause groundwater degradation. As a condition of this waiver, the dredged material must be nontoxic and discharged to land where it will not erode or deposit sediment into any surface waters or storm drains.

This waiver category covers only the disposal of dredge material to land, and is not associated with the dredging operation itself. In-stream dredging operations are covered by federal regulations under a 404 permit for Waters of the U.S. or by Statewide General Order 2004-0004-DWQ for non-Jurisdictional Waters. Long-term or major dredging projects involving

large volumes of dredge material need to be regulated under an individual waiver or WDRs. The disposal of dredge material under this waiver should be conditional upon the use of best management practices (BMPs) to prevent erosion or runoff conditions from the emplaced sediments, and prohibit the disposal of dredge material in wetland areas or surface water drainage courses. Larger projects or projects with contaminants that have a greater potential to cause groundwater degradation or which might affect surface waters or wetland areas are best regulated under general or individual WDRs.

The waiver of WDRs (but not RWDs) for disposal of dredge material to land from minor dredging operations should be continued, provided that:

- If the dredged material may contain constituents that are potentially hazardous or at concentrations that could impair beneficial uses of receiving water, the discharger must provide a chemical analysis of the fine (silt and clay) portion of the substrate material and a written waste management plan (WMP) describing BMPs which will be employed to prevent excess erosion and prevent runoff from the emplaced sediments; and
- Excludes disposal of dredge material from mining operations.

#### **4. Inert Solid Waste Disposal**

"Inert wastes" are defined in California Code of Regulations, title 27 (Title 27), section 20230(a) as "that subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste".

The disposal of "Inert Solid Wastes" are covered under the Statewide General Order for low threat discharges to land. Specific requirements of the Statewide General Order limit enrollment to operations: (1) covering two acres of land or less, (2) that do not contain hazardous waste or soluble pollutants at concentrations in excess of water quality objectives and do not contain significant quantities of decomposable waste. The requirements include a list of acceptable inert wastes; other potential inert wastes not included on the list must be approved by the Central Valley Water Board prior to disposal.

With the existence of Statewide General Order 2003-0003-DWQ, the waiver of WDRs and RWDs for Inert Solid Waste disposal should be renewed, provided that:

- Short-term or one time disposal of no more than a few months.
- Wastes must be insoluble, without decomposable solids, and contain no "free liquids".
- The site must be well constructed, managed to restrict access, and outside of natural or man-made drainage courses.
- Excludes tires, semi-solid wastes, dewatered sludge, liquid wastes, ash, fresh concrete solids, and any waste deemed by the Executive Officer to have the potential to degrade groundwater, even if classified as inert by Title 27.

Inert Solid Waste disposal operations that cannot meet the four conditions listed above should be regulated under the State General Order for low threat discharges to land or an individual waiver or WDRs.

## **5. Test Pumping of Fresh Water Wells**

Many public and private well owners need to periodically discharge potable or relatively contaminant-free water generated when a well is developed or maintained, or from the periodic discharge of purge water from monitoring wells in instances where there is no threat to water quality or nuisance. Water quality parameters of concern for this type of discharge are generally suspended material and turbidity, which are primarily a concern to surface water. High volume discharges have the potential to impact adjacent property owners or surface water and BMPs such as berms or setbacks should be employed to prevent excessive erosion or runoff conditions.

Discharge of water to land from development and testing of fresh water wells, including monitoring wells, is covered under the Statewide General Order for low threat discharges to land, which specifies that the discharge shall remain onsite and not be discharged in a manner such as to cause ponding or threaten discharge to surface waters.

The waiver of WDRs and RWDs for those discharges generated from a single one time discharge during testing or development of an individual domestic or irrigation supply well, or purge water from routine sampling of monitoring wells as part of a compliance monitoring program should continue, provided that:

- The discharge remains on the property where the test is being conducted, unless there is a signed use agreement; and
- The discharge shall not be conducted in a manner such as to cause nuisance conditions or threaten surface waters; and
- Excludes discharge from wells associated with a cleanup or remediation project unless conducted under an approved cleanup or remediation management plan.

## **6. Swimming Pool Discharges**

Pool water discharges are infrequent, low to high volume discharges that are relatively free of waste constituents. In urban areas, disposal of pool water is regulated by municipalities, which typically have engineered stormwater systems that may require a pool drainage permit before discharge. Areas that do not have engineered stormwater systems depend on land discharge. Direct flow of pool water onto land provides some treatment before it enters into groundwater and is preferred over surface water discharges.



Swimming pool discharges are covered under Statewide General Order for low threat discharges to land, but it does not contain any specific requirements for this category. The waiver of WDRs and RWDs for these discharges should be renewed for those discharges involving a single individual pool at infrequent intervals (e.g., once every three years).

## **7. Construction - Dewatering Discharges**

Dewatering discharges include extracted groundwater and water collected from cofferdams or diversions. Discharges to land, instead of to surface water, are typically one-time, non-stormwater discharges of short duration. Discharge may be to a terminal basin or used for irrigation or dust control. These discharges may be onsite or to land in the same proximity with appropriate agreement from the property owner.

Construction dewatering discharges are covered under Statewide General Order for low threat discharges to land. The Statewide General Order excludes dewatering operations in areas with unstable geologic units or expansive soils or in areas where it might conflict with existing agricultural use or Williamson Act contracts.

With the existence of Statewide General Order 2003-0003-DWQ, which includes low threat discharges to land from construction dewatering operations, the waiver of WDRs and RWDs for construction dewatering discharges should be renewed only for those discharges of limited duration of no more than a few weeks that pose a low risk of nuisance (e.g., little or no organic matter) and which can infiltrate/evaporate at the construction site within 72 hours. Discharges of more than a few weeks, or requiring treatment, or which cannot readily infiltrate/evaporate should be regulated under the Statewide General Order for low threat discharges or an individual waiver or WDRs.

## **8. Hydrostatic Testing**

This category covers discharge to land of hydrostatic test water. Hydrostatic testing is generally a one-time activity used to demonstrate the integrity of pipelines and pressure vessels. Source waters for hydrostatic tests are local and, except for waste constituents picked up from the structure being tested, have like or better quality than underlying groundwater. The spent hydrostatic test waters may discharge to an impoundment for infiltration, or used for irrigation, or dust control.

Discharges of hydrostatic test water to land from new and potable water pipelines pose very little threat to groundwater quality from soluble constituents. Pipelines and tanks that have previously contained crude or refined oil and gas present a different situation. If hydrostatic testing waters are suspect, pre-discharge analytical testing must be performed.

Discharges to land from hydrostatic testing waters are covered under Statewide General Order for low threat discharges to land. This Order does not contain any specific requirements for this category, except it excludes water used to test tanks or pipelines that have been used to

store or convey any medium other than potable water unless the Discharger has demonstrated to the appropriate Regional Water Board that all residual pollutant concentrations have been reduced to levels below water quality objectives.

With the existence of the Statewide General Order, which includes low threat discharges to land from hydrostatic testing, the waiver of WDRs (but not RWDs) for discharges of hydrostatic testing waters should be renewed only for those discharges of limited duration of no more than a few weeks, provided the discharger has demonstrated to the Central Valley Water Board that all residual pollutants have been removed or are below water quality objectives and that the water has infiltrated/evaporated within 72 hours. Discharges of more than a few weeks, requiring treatment, or cannot infiltrate/evaporate within 72 hours should be regulated under a General Order or an individual waiver or WDRs.

The need to submit a RWD should be waived for those discharges from potable water lines or tanks as they are of good quality and pose little threat to waters of the State.

## **9. Agricultural Commodity Wastes**

This category covers discharge to land of commodity wastes for agricultural use. This waiver allows for the expedient discharge of unsalvageable commodities to land under atypical situations. The primary threat from the discharge occurs from possible nuisance conditions as a result of decomposition. The typical mitigation is to spread the waste over a reasonable area and plow it under before it begins to generate odors from decomposition. Sites may require berms, setbacks, and/or other measures to prevent discharge to surface water.

Because the Central Valley is one of the world's largest food producing regions, numerous scenarios can generate commodity waste. A typical commodity becomes a waste as a result of culling, spoilage, or contamination. Processed food and processed food residuals are not included in this type of waste (e.g., whey). This waiver does not extend to dead animals or animal byproducts (i.e., flesh, organs, unprocessed hide, blood, bone, and marrow).

The California Code of Regulations, title 3 (Food and Agriculture), division 6 (Pesticide and Pest Control Program), section 6000 defines an "agricultural commodity" as an unprocessed product of farms, ranches, nurseries and forests (excepting livestock, poultry, and fish), that includes: fruits, vegetables, grains, legumes, animal feed and forage crops, wood, fiber, and oil crops (i.e., safflower, sunflower, corn, and cottonseed).

Generally, commodity wastes are produced as part of the seasonal wasting of culls or from a specific incident, such as the improper application of pesticide, making a field product no longer suitable for human consumption. Other instances associated with a commodity becoming a waste include transportation accidents, loss of refrigeration, or any of a variety of conditions resulting in spoilage. In most cases, when reasonably fresh and uncontaminated, the commodity waste may be used as cattle or swine feed.

Waiver of WDRs and RWDs for a limited (one-time) discharge, and WDRs (but not RWDs) for a continuous or recurring discharge, to land of agricultural commodity wastes should be continued, provided that:

- BMPs are employed to preclude the potential for nuisance conditions;
- Wastes must not be discharged in proximity to buildings occupied by people; and
- Excludes discharge of processed food or processed food residuals (e.g., whey), dead animals, or animal byproducts.

#### **10. Disposal of Residual Waste to Land as a Soil Amendment**

This category covers discharge to land of residual wastes, previously referred to as "Industrial Wastes" for use as a soil amendment. A soil amendment is any material added to the soil to improve its physical properties, such as water retention, permeability, infiltration, pH, or to add nutrient or organic matter for plant growth. The benefit of a soil amendment is dependent on soil type, climate, and crop type. This category would not include the use of biosolids from municipal treatment plants as a soil amendment as this is generally covered under Statewide General Order 2004-0012-DWQ.

Residual wastes (i.e., manure, bone meal, used diatomaceous earth, dried stillage leathers from wineries, etc.) contain constituents, which when applied correctly will improve soil conditions and add needed nutrients and organic material. However, these materials can also contain additional waste constituents such as salts that can impact groundwater quality and affect beneficial uses.

The Central Valley Water Board encourages the regulation of these types of discharges by individual counties as this conserves staff resources and provides for better local oversight. In June 2009, the Executive Officer of the Central Valley Water Board issued a conditional approval of the County of Stanislaus' Food Processing By-Products Use Program and granted coverage under the General Waiver.

Waiver of WDRs and RWDs for the disposal of residual wastes to land as a soil amendment should be continued, provided that:

- The discharge is enrolled under an approved County Program.

Discharges in counties without an approved program or which do not qualify for coverage under a county program, should be regulated under an individual waiver or WDRs.

#### **11. Water Recycling for Construction Projects and Road Dust Control**

During the 1976-1977 drought, necessity drove the increased use of recycled water by California water agencies which were not prepared for reduced supplies. Unlike other types of

recycling (e.g., green belt water, power plant feed water, etc.), use of recycled water for construction activities and road dust suppression are typically of limited duration.

California Code of Regulations, title 22 (Title 22) contains criteria for a number of uses of recycled water, including construction and dust suppression (i.e., Section 60307(b) states that disinfected secondary-23 recycled water (as defined by section 60301.225) may be used for backfill consolidation around non-potable piping, soil compaction, concrete mixing, and dust control on roads and streets). In addition, the recycled water typically must be trucked to a construction site or stretch of unpaved road and the amounts used are restricted to that necessary to accomplish sound construction or minimize dust while maximizing coverage, so runoff and infiltration are unlikely. Waiver of water recycling requirements (WRRs) for construction projects and road dust suppression facilitates the reuse of recycled water by expediting the process. Restricting use to wastewater that has been treated to Title 22 standards and adherence to Title 22 use restrictions will protect public health.

Waiver of WRRs (but not a Report of Water Recycling or Title 22 Engineering Report) for use of recycled water for construction projects and road dust control should be continued, provided that:

- Recycled water must be treated to Title 22 standards by permitted recycled water producer; and
- User must certify that the discharge will conform to Title 22 restrictions and California Department of Public Health Guidelines and that the use has been approved by local and State health departments.

## **12. Projects Requiring Water Quality Certification**

This category was not renewed in the General Waiver adopted in 2008 and should not be renewed in the current General Waiver as dredge and fill activities are now covered under adopted Statewide General Order 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that Have Received State Water Quality Certification* for dredge and fill activities associated with jurisdictional waters and Statewide General Order 2004-0004-DWQ, *Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction* for dredge and fill activities associated with waters of the State. Disposal of dredged material would continue to be waived under Category No.3 of the General Waiver for disposal of dredge material to land.

## **13. Small, Short-Term Sand and Gravel Operations**

Sand and gravel operations provide aggregates for construction projects. Water may be used in these types of operations to clean aggregate and to control dust, which can result in the

discharge to land (e.g., open ground or a holding pond) of wastewater containing silt and sediment.

Minor sand and gravel operations are generally of short duration (e.g., less than one year). Water quality parameters of concern for this type of discharge are generally suspended solids and sediments, which are primarily a concern to surface waters. Process wastewater from these operations discharged to land poses almost no threat to groundwater because suspended solids are effectively filtered out as the water percolates through the unsaturated zone or vadose zone. The discharge should be conditional upon use of BMPs to prevent erosion or runoff conditions.

Waiver of WDRs (but not RWDs) for discharge to land from small, short-term, sand and gravel operations should be included in the General Waiver, provided that:

- BMPs are employed to prevent excessive erosion or runoff conditions;
- The impoundment or use area poses low risk of nuisance;
- All wash waters are confined to land; and
- Excludes sand and gravel operations in stream channels or drainage courses that have the potential to discharge to surface waters.

#### **NOT COVERED BY THE PROPOSED WAIVER**

There were several types of discharge included in the original General Waiver adopted in 1982 (Resolution 82-036) that were not included under the previous General Waiver adopted in 2008. The list of discharge types below were not considered for renewal or were not renewed in General Waivers adopted in 2003 and 2008 and are not under consideration for renewal.

- Clean oil containing no toxic materials;
- Stormwater runoff;
- Erosion from development;
- Pesticide rinse waters from applicators;
- Confined animal waste facilities;
- Minor stream channel alterations and suction dredging;
- Small metal mining operations;
- Food processing wastes spread to land;
- Timber harvesting;
- Minor hydro projects;
- Irrigation return water; and
- Septic tank/leachfield systems.

## **REPORTING REQUIREMENTS**

The waiver requires submittal of reports as directed by the Executive Officer. The reports would represent the minimum reporting threshold to monitor compliance with waiver conditions and provide data necessary for consideration in waiver renewal.

## **BEST MANAGEMENT PRACTICES**

A condition of waiver for several discharge categories is implementation of BMPs to mitigate for potential water quality impacts. The set of possible BMPs for each specific type of discharge category is large. BMPs are typically developed to insure that specific types of industrial activities are conducted in an environmentally responsible manner. BMPs change with time as new standards and information becomes available from various industry, government and academic institutions charged with maintaining and updating them. In the context of this waiver, BMPs refer to the set of methods, measures, and practices employed by a particular industry and practicable at the site, to limit potential impacts to water quality. Examples of BMPs include prohibited practices, schedules of activities, maintenance procedures, and other management practices.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

On 23 December 1981, the Central Valley Water Board adopted a Negative Declaration for the waiver of WDRs for 23 categories of discharges. The Negative Declaration determined that the waiver of WDRs for these discharges would not cause a significant environmental impact. With the exception of drilling muds and boring wastes utilized in oil and gas development, there have been no significant changes in the discharges to be covered in the proposed renewal of the General Waiver, so the Negative Declaration still applies.

## **ANTIDEGRADATION / RESOLUTION 68-16**

The discharges proposed for coverage under the General Waiver renewal are those that represent the "lowest threat" to water quality or nuisance. By virtue of waste constituent, constituent concentration, constituent control, and the conditions prescribed in the waiver, the specific discharge types proposed for renewal under the General Waiver can be effectively mitigated to have little or no effect on the quality and beneficial uses of waters of the State and therefore is consistent with the antidegradation policy.

## D.6 Region 6. Lahontan Regional Water Quality Control Board

Order No. R6T-2008-0023. NPDES No. CAG996001 Renewed Waste Discharge Requirements and National Pollutant Discharge Elimination System General Permit for Limited Threat Discharges to Surface Waters

Order No. R6T-2011-0019. NPDES No. CAG616002 General Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit, Counties of Alpine, El Dorado, and Placer

Order No. R6T-2003-0004. General Waste Discharge Requirements for Small Construction Projects, Including Utility, Public Works, and Minor Streambed/Lakebed Alteration Projects in the Lahontan Region Excluding the Lake Tahoe Hydrologic Unit.

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

BOARD ORDER NO. R6T-2008-0023  
NPDES NO. CAG996001

**RENEWED WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT  
DISCHARGE ELIMINATION SYSTEM  
GENERAL PERMIT FOR  
LIMITED THREAT DISCHARGES TO SURFACE WATERS**

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The California Regional Water Quality Control Board, Lahontan Region (Water Board), makes the following Findings:

1. Discharger

Individuals, public agencies, private businesses, and other legal entities (hereafter Discharger) often need to discharge high quality or relatively pollutant-free water that poses little or no threat to water quality and the environment. This Region-wide General National Pollutant Discharge Elimination System (NPDES) Permit (General Permit) regulates certain categories of these discharges to waters of the United States within the Lahontan region.

2. Permit History

Waste Discharge Requirements (WDRs) for limited threat discharges resulting from dewatering and pump testing activities were adopted on June 4, 1998, under NPDES Permit No. CAG996001 entitled *NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT FOR LIMITED THREAT DISCHARGES TO SURFACE WATERS* (Board Order No. 6-98-36). Reissuance of this general permit occurred July 9, 2003, with adoption of Board Order No. R6T-2003-0034, as part of a State-wide effort to conform to current regulations, and a Region-wide effort to regulate limited threat discharges that may not be currently permitted or may be subject to an individual NPDES permit when a general permit would be more appropriate.

3. Reason for Action

The purpose of this Order is to renew NPDES Permit No. CAG996001 and the associated monitoring and reporting program.

4. Justification for the General Permit

There are numerous discharges to surface waters from similar sources that do not contain significant quantities of pollutants. Many of these discharges are more appropriately regulated under a general permit rather than an individual permit. Regulating these discharges under a general permit provides adequate control, monitoring, and reporting requirements.

40 Code of Federal Regulations (CFR) Section 122.28 provides for the issuance of general permits to regulate discharges of wastes that are generated from similar sources. On September 22, 1989, the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Water Board) entered into a memorandum of agreement which authorized and established procedures for the State Water Board and the Regional Water Boards to issue general NPDES permits in accordance with 40 CFR 122.28.

5. Enrollment Criteria

To be authorized by this General Permit, discharges must meet the following criteria:

- a) Pollutant concentrations in the discharge do not (1) cause, (2) have a reasonable potential to cause, or (3) contribute to an excursion above any applicable federal water quality criterion promulgated by the USEPA pursuant to the Clean Water Act (CWA) Section 303, or water quality objective adopted by the Water Board or the State Water Board, including discharge prohibitions for the receiving waters in the Lahontan Region.
- b) Pollutant concentrations in the discharge will not cause or contribute to degradation of water quality or impair beneficial uses of receiving waters.
- c) The discharge does not cause acute or chronic toxicity in the receiving waters.
- d) Discharge to land is not a practical alternative based on information provided by the discharger.

6. Obtaining Permit Authorization

To obtain authorization for discharges under this General Permit, the owner or developer responsible for the project must submit a Notice of Intent (NOI) with an appropriate fee, and a Best Management Practices (BMPs) Plan (General Permit Attachment E) to control the discharge. BMPs shall include disposal practices to ensure compliance with the General Permit. The discharger shall be required to conduct monitoring and reporting and should submit any available data relevant to the discharge and the receiving water with the NOI. The owner or developer shall be authorized to discharge under the terms and conditions of this General Permit only after receiving a written Notice of Applicability (NOA) from the Water Board Executive Officer, or his or her designee.

7. Individual Waste Discharge Requirements

The Water Board may determine that a waste discharge eligible for coverage by this General Permit is more appropriately regulated under an individual NPDES permit, another general NPDES permit, or general or individual WDRs for discharges to land. In such cases, the applicant shall be notified of the alternative requirements and application processes. The applicability of this General Permit for the discharge is immediately terminated on the date that the applicant is notified in writing by the Water Board Executive Officer that the General Permit for the discharge is revoked or denied.

8. Land Disposal

The Water Board encourages the elimination of pollutant discharges to surface waters by disposing of wastewater on land where practicable, and requires applicants for this General Permit to evaluate land disposal as a first alternative. Where evidence shows that year-round land disposal is not practicable, dischargers must evaluate dry season land disposal as an alternative. Discharge under this General Permit will only be authorized when land disposal is not a practical or feasible option based on information or evidence provided by the applicant within the NOI. The information provided will be reviewed on a case-by-case basis. Such information may include, but is not limited to, considerations of the availability of land for disposal, the quantity and timing of the discharge, effects on groundwater quality, cost, disruptions (to services, plant or animal communities, endangered species, etc.), and other factors relevant to the protection of water quality.

9. Discharge Characteristics

This General Permit meets the requirements of 40 CFR Section 122.28(a)(2)(ii) for general permits. Waste discharges permitted under this Order:

- a) Involve the same or substantially similar types of operations;
- b) Discharge the same types of wastes or engage in the same types of disposal practices;
- c) Require the same effluent limitations, operating conditions, or standards for disposal;
- d) Require the same or similar monitoring; and
- e) Are more appropriately regulated under a general permit than individual permits.

10. Discharge Categories Covered Under This Permit

This General Permit covers discharges of pollutants to surface waters that constitute low-threat waste loads meeting criteria specified in this General Permit. This General Permit covers discharges from the following sources provided that the discharge does not contain or produce significant quantities of pollutants that could adversely affect designated beneficial uses:

- a) Diverted stream flows;
- b) Construction dewatering;
- c) Dredge spoils dewatering;
- d) Subterranean seepage dewatering;
- e) Well construction and pump testing of aquifer supplies;
- f) Geothermal well testing;
- g) Hydrostatic testing, maintenance, repair, and disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
- h) Water treatment plant backflushing, residuals, and wasting;
- i) Fire hydrant testing or flushing;
- j) Hydrostatic testing of newly constructed and yet to be utilized pipelines, tanks, reservoirs, etc., used for purposes other than potable water supply (gas, oil, reclaimed water, etc.).

This General Permit is intended to regulate the limited threat discharges identified above. It is not intended for ground water contamination cleanup projects or to regulate discharges that contain industrial chemicals, chlorinated hydrocarbons, or organic pollutants, herbicides, pesticides, oil and grease, radioactivity, salinity or any substance or physical property in significant quantities that may adversely affect beneficial uses or cause acute or chronic toxicity to aquatic life in the receiving waters for the discharge.

Discharges to a sanitary sewer do not need regulatory coverage under the NPDES regulations, although the agency controlling the sanitary sewer may specify requirements for discharges to its conveyance and/or treatment system.

#### 11. Flow Characteristics and Rates

Discharges authorized by this General Permit are typically short-term, seasonal, or intermittent, but the duration of the discharge is not necessarily a limiting factor in the applicability of this permit for a specific discharge. Discharge and receiving water flow rates shall be considered but are not necessarily a limiting factor in the applicability of this General Permit for a specific discharge, except for discharges that are granted a categorical exception to the California Toxics Rule (see Finding No. 19, below). The discharge flow characteristics, and anticipated flow rates and volumes, shall be specified in the NOI.

#### 12. Discharge Classes

The USEPA Permit Compliance System (PCS) is the national database used to track compliance with NPDES Permit requirements. Facilities in PCS are identified as either major or minor. Within the major/minor classification, facilities are grouped into municipals or non-municipals. Major municipals are defined as facilities which discharge at least one million gallons per day or more. Major non-municipals are facilities whose major rating code (MRAT) is at least 80 or higher. The MRAT is

determined by completing a USEPA NPDES Permit Rating Work Sheet (<http://www.epa.gov/npdes/pubs/owm9116.pdf>), and is based on six factors including: toxic pollutant potential, flow/streamflow volume, conventional pollutants, public health impacts, water quality factors, and proximity to near coastal waters. If an individual discharge is classified as a major discharge based on State Water Board or USEPA criteria and regulations, this General Permit will not be applicable to the discharge

13. Water Quality Characteristics

Water quality characteristics and potential constituents of concern for the discharge categories identified above in Finding No. 10 are tabulated below. Intermittent testing will be required throughout the period of discharge to ensure compliance with requirements related to the constituents of concern for particular discharges.

**POTENTIAL CONSTITUENTS OF CONCERN**

| <b>Discharge Category</b>   | <b>Potential Constituents of Concern</b>  |
|---|---|
| a) Diverted stream flows  | Sediments, turbidity, detritus  |
| b) Construction dewatering  | Sediments, turbidity, construction materials, total petroleum hydrocarbons                          |
| c) Dredge spoils dewatering   | Sediments, turbidity, nutrients (N, P), total petroleum hydrocarbons                                |
| d) Subterranean seepage dewatering  | Sediments, total dissolved solids, total petroleum hydrocarbons                                     |
| e) Well construction and pump testing of aquifer supplies   | Sediments, total dissolved solids   |
| f) Geothermal well testing  | Sediments, total dissolved solids, metals, heat   |
| g) Hydrostatic testing, maintenance, repair, and disinfection of potable water supply pipelines                     | Minor adhesives, scale, corrosion products, hardness, chlorine, rust, iron                          |
| h) Water treatment plant backflushing, residuals, and wasting   | Filter sludge, water treatment chemicals, iron, chloride, aluminum sulfate, chlorine, algae, metals |
| i) Water supply system flushing and flow testing  | Sediment, total dissolved solids, scale, corrosion products, chlorine                               |
| j) Hydrostatic testing of new pipelines, tanks, reservoirs, etc., used for purposes other than potable water supply | Scale, corrosion products, total petroleum hydrocarbons   |

14. Effluent Limitations

Federal regulations require effluent limitations for all pollutants that are or may be discharged at a concentration causing or having reasonable potential to cause, or contribute, to in-stream concentrations above narrative or numerical water quality objectives. Based on the enrollment criteria, application information, and other data required as part of this General Permit, authorized discharges are not expected to cause or contribute to an in-stream excursion above a water quality objective. Throughout the Lahontan Region, large amounts of variance not only occur from site to site, but also between receiving waters. Therefore, it is not feasible or practical to establish numeric effluent limitations for pollutants in discharges from the above-cited limited-threat discharge sources. Instead, the provisions of this General Permit require implementation of BMPs to control and abate the discharge of pollutants to surface waters and to achieve compliance with Best Available Technology Economically Achievable (BAT)/Best Conventional Pollutant Control Technology (BCT) requirements and compliance with Basin Plan water quality objectives. Additional information and water quality monitoring data obtained during the term of this General Permit may be assessed by the Water Board staff to determine whether effluent limits may be needed. If necessary, this permit may be re-opened and modified to include effluent limits.

15. Basin Plan

In compliance with the Porter-Cologne Water Quality Control Act, the Water Board adopted an updated *Water Quality Control Plan for the Lahontan Region* (Basin Plan) that became effective on March 31, 1995. The Basin Plan incorporates State Water Board plans and policies by reference, contains beneficial use designations and water quality objectives for all waters of the Lahontan Region, and provides a strategy for protecting beneficial uses of surface and ground waters throughout the Lahontan Region. The Basin Plan can be accessed on the Internet at <http://www.waterboards.ca.gov/lahontan/>, reviewed at the Water Board office, or purchased at a nominal cost.

16. Beneficial Uses - Surface Waters

Designated beneficial uses of surface waters for many locations within the Lahontan Region include: municipal and domestic supply and agricultural supply (MUN, AGR); ground water recharge and freshwater replenishment (GWR, FRSH); water contact and non-contact recreation (REC-1, REC-2); cold freshwater habitat, spawning, reproduction, and development, commercial and sport-fishing (COLD, SPWN, COMM, respectively); wildlife habitat (WILD); water quality enhancement and flood peak attenuation/flood water storage (WQE, FLD).

Waters at some locations may also include designations for: industrial service supply (IND), industrial process supply (PRO), hydropower generation (POW), navigation

(NAV), preservation of biological habitats of special significance (BIOL), aquaculture (AQUA), warm freshwater habitat (WARM), inland saline water habitat (SAL), rare, threatened, or endangered species (RARE), and migration of aquatic organisms (MIGR).

Table 2-1 in the Basin Plan may be consulted for the beneficial use designations for any specific water body.

17. Beneficial Uses - Ground Water

Designated beneficial uses of ground water for typical locations within named ground water basins in the Lahontan Region are municipal and domestic, agricultural, and industrial supply and fresh water recharge (MUN, AGR, IND, FRSH, respectively). Select named ground water basins include designations for aquaculture and wildlife habitat (AQUA, WILD). Unnamed ground water basins have the MUN designation. Table 2-2 in the Basin Plan may be consulted for the beneficial use designations for any specific ground water basin.

18. Clean Water Act Standards

Effluent limitations, and toxic and pretreatment effluent standards established pursuant to Sections 301, 302, 304, and 307 of the CWA and amendments thereto are applicable to the discharge.

19. California Toxics Rule

The USEPA promulgated the California Toxics Rule (CTR) in May 2000. The CTR, which is codified in 40 CFR Section 131.38, establishes numeric criteria for toxic priority pollutants for California's inland surface waters, enclosed bays, and estuaries. Concurrently with the CTR adoption, the State Water Board adopted a Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP).

The SIP establishes procedures for assessing priority pollutants requiring water quality-based effluent limitations, and for calculating limits where necessary to maintain water quality objectives. Compliance requires Water Board analysis to determine whether priority pollutants are present that require effluent limitations to prevent violations of receiving water quality objectives. The determination shall be made with data of the quality required in the SIP for each of 126 priority pollutants (See General Permit Attachment A). If pollutants are present that may cause or contribute to violations of an applicable federal water quality criterion for receiving waters or numeric effluent limits are deemed necessary, coverage under the General Permit may be denied or revoked by the Water Board Executive Officer, as this General Permit does not contain numeric effluent limitations.

Laboratory data, with reporting limits required in the SIP, is required for all priority pollutants. Other recent information of suitable quality that characterizes priority pollutants in accordance with the SIP requirements may be used if determined applicable by the Water Board. If recent data for a water source is not available, sampling and analyses for CTR priority pollutants is required. Where feasible, such analyses should be performed prior to discharge. However, in some cases that may not be feasible. Based on the limited threat discharge categories, priority pollutants are generally not anticipated at levels that will violate receiving water objectives. It is therefore not unreasonable to require priority pollutant monitoring upon commencement of discharge where pre-discharge monitoring is infeasible. Where pre-discharge CTR monitoring results are not provided with the NOI, the Water Board Executive Officer may request such results pursuant to CWC Section 13267 if deemed necessary and/or feasible.

#### SIP Exceptions to the CTR:

The SIP (Section 5.3) authorizes short-term and/or seasonal exceptions from the CTR provisions for certain categories of discharges by public entities, such as for resource management, and fulfillment of statutory requirements of the federal Safe Drinking Water Act or the California Health and Safety Code (e.g., draining water supply reservoirs, canals, pipelines, municipal storm water conveyances and treatment facilities for cleaning and maintenance).

This General Permit authorizes a categorical exception to the criteria and objectives in the CTR and SIP for discharges as described in Finding No. 10, g, h, and i, and requires full compliance with the SIP for other discharge categories (a.-f., and j., in Finding No.10).

Waste discharges in categories g, h, and i in Finding No.10 carried out to comply with the Safe Drinking Water Act or the California Health and Safety Code meet the conditions for a categorical exception to criteria and objectives in the CTR and SIP. In this General Permit, the Water Board hereby grants a categorical exception for those dischargers meeting the SIP exception criteria, as determined by the Executive Officer based on information provided by the applicant, as follows.

To be eligible for a categorical exception to the CTR/SIP requirements, the discharger shall notify potentially affected public and governmental agencies and shall submit project details to the Executive Officer for approval. To expedite the approval process for expected or routine activities that fall under categorical exceptions, the discharger is advised to file the following information when seeking an exception:

- 1) A detailed description of the proposed action, including the necessity for, and the proposed method of completing, the action;
- 2) A time schedule;



- 3) A discharge and receiving water quality monitoring plan (before project initiation, during the project, and after project completion, with the appropriate quality assurance and quality control procedures);
- 4) California Environmental Quality Act documentation;
- 5) Contingency plans;
- 6) Identification of alternative water supply (if needed); and
- 7) Residual waste disposal plans.

Additionally, Section 5.3 of the SIP requires the discharger to provide certification by a qualified biologist that the receiving water beneficial uses have been restored upon completion of the project.

20. Total Maximum Daily Load

The Water Board is currently developing and implementing Total Maximum Daily Loads (TMDLs) for many impaired water bodies in the Lahontan Region. Enrollees under this General Permit that discharge to these impaired water bodies may be required to collect discharge monitoring data applicable to developing appropriate future wasteload allocations for the discharge.

21. California Environmental Quality Act

The action to adopt a general NPDES permit is exempt from provisions of Chapter 3 of the California Environmental Quality Act (CEQA, Public Resources Code Section 21000, et seq.), in accordance with Section 13389 of the California Water Code. However, Water Board action to approve a categorical exception to the CTR/SIP is subject to CEQA. For the purpose of adopting a categorical exception to the CTR/SIP, the Water Board is the lead agency. A Mitigated Negative Declaration for the Water Board action to approve a categorical exception to the CTR/SIP for certain categories of limited threat discharges was circulated for public review, and was approved by the Water Board on July 9, 2003.

22. Anti-Backsliding

40 CFR Section 122.44(l)(1) requires that effluent limitations for reissued NPDES permits be at least as stringent as the previous permit, unless certain grounds for "backsliding" apply. There were no effluent limitations in the previous General Permit cited in Finding No. 2, above, and there are no effluent limitations in this revised General Permit. Therefore, this General Permit is in compliance with Anti-Backsliding provisions of 40 CFR Section 122.44.

23. Anti-Degradation

The Water Board has considered anti-degradation pursuant to 40 CFR 131.12 and State Water Board Resolution No. 68-16, which states, in part:

"WHEREAS the California Legislature has declared that it is the policy of the State that the granting of permits and licenses for . . . the disposal of wastes into the waters of the State shall be so regulated as to achieve highest water quality consistent with maximum benefit to the people of the State and shall be controlled so as to promote the peace, health, safety and welfare of the people of the State . . . ."

and

" . . . 1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.

2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained. . . ."

This General Permit is not applicable to discharges that have the potential to violate water quality standards as enumerated in Finding No. 5, letters a., b., and c., above. In addition, discharges that would result in degradation of the receiving waters are not eligible for coverage, except as consistent with the policy provisions of the SIP regarding categorical exceptions for discharge categories g., h., and i., of Finding No. 10, above, as carried out to comply with the Safe Drinking Water Act or the California Health and Safety Code. The State Water Board has adopted these SIP exceptions as implemented here in furtherance of promoting the peace, health, safety and welfare of the people of the State to achieve the maximum benefit to the people of the State. Discharges authorized under this General Permit must utilize BMPs and meet waste discharge requirements that require the best practicable treatment or control of the discharge. If a discharge is not consistent with the above-cited regulations, requirements and policies it will not be authorized under this General Permit.

24. Local Agency Authority

This Order does not preempt or supersede the authority of other federal, state, or local agencies to prohibit, restrict, or control the discharge of wastewater subject to applicable law or regulation.

25. Public Notification

The Water Board has notified interested agencies and persons of its intent to prescribe waste discharge requirements in this General Order and has provided them with an opportunity to submit their written views and recommendations and an opportunity for a public hearing. The Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that all dischargers indicating their intention to be regulated under the provisions of this General Permit, and all heirs, successors, or assigns, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, shall comply with the following:

**A. Application:**

Dischargers described in Finding No. 1 above are eligible for coverage under this General Permit provided that:

1. The discharger submits to the appropriate address below a complete and accurate NOI to comply (General Permit Attachment D), project map, and first annual fee (checks made payable to "State Water Resources Control Board" in the amount of currently \$1,000 and subject to change) to cover eligible low-threat discharges by the Discharger within the boundaries of the Lahontan Region. The NOI must be signed in accordance with the signatory requirements of the Standard Provisions, General Permit Attachment B., number 14. The NOI, fee and BMP Plan must be submitted to either:

**For projects north of Conway Summit, Mono County;**

**California Regional Water Quality Control Board,  
Lahontan Region  
2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA 96150**

**OR**

**For projects south of Conway Summit, Mono County;**

**California Regional Water Quality Control Board,  
Lahontan Region  
14440 Civic Drive, Suite 200  
Victorville, CA 92392**

2. The Discharger, upon written request, submits additional information necessary to ascertain whether the discharge meets the criteria for coverage under this

General Permit, including, but not limited to, information pertaining to the categorical exception to CTR/SIP requirements, if applicable (See Finding No. 19, above).

3. No discharge under this General Permit is authorized until a written Notification of Applicability (NOA) is received from the Water Board Executive Officer or his or her designee or the permit application is deemed complete pursuant to Section 65956 of the California Government Code and the discharge is otherwise permissible by law. Where the proposed discharge meets the eligibility criteria for a CTR/SIP categorical exception, as determined by the Executive Officer, the NOA will notify the Discharger that the Water Board has granted an exception for specific discharges. If coverage under the General Permit and/or the CTR exception is denied, the applicant will be informed in writing by the Executive Officer.

#### **B. Discharge Prohibitions:**

Section 4.1 of the Basin Plan contains prohibitions against the discharge of wastes to surface waters in various locations throughout the Lahontan Region. Any discharge proposed in an area where a discharge prohibition may apply shall be evaluated on an individual basis to determine if the discharge would violate a prohibition. In some instances, exemptions to certain prohibitions may be granted on a case-by-case basis by resolution of the Water Board, or by the Executive Officer in accordance with Water Board policy. In addition to the specific prohibitions for various locations in the Region, the following general prohibitions apply throughout the Lahontan Region.

1. The discharge of waste that causes violation of any narrative water quality objective contained in the Basin Plan, including the Nondegradation Objective, is prohibited.
2. The discharge of waste that causes violation of any numeric water quality objective contained in the Basin Plan is prohibited.
3. Where any numeric or narrative water quality objective contained in the Basin Plan is already being violated, the discharge of waste that causes further degradation or pollution is prohibited.
4. The discharge of untreated sewage, garbage, or other solid wastes, into surface waters of the Region is prohibited.
5. For municipal and industrial discharges:
  - a. The discharge, bypass, or diversion of raw or partially treated sewage, sludge, grease, or oils to surface waters is prohibited.

- b. The discharge of wastewater except to the designated disposal site (as designated in waste discharge requirements) is prohibited.
- c. The discharge of industrial process wastes to surface waters designated for the Municipal and Domestic Supply (MUN) beneficial use is prohibited. The discharge of industrial process wastes to surface waters not designated for the MUN use may be permitted if such discharges comply with the General Discharge Limitations in Section 4.7 (of the Basin Plan) and if appropriate findings under state and federal anti-degradation regulations can be made.

### C. Solids Disposal

1. Collected screenings and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Chapter 15, Division 3, Title 23, of the California Code of Regulations (CCR).
2. Any proposed change in solids use or disposal practice shall be reported to the Executive Officer and USEPA Regional Administrator at least 90 days in advance of the change.

### D. Receiving Water Limitations

The following numerical and/or narrative water quality objectives apply to all surface waters, including wetlands, in the Lahontan Region. The discharge of waste to surface waters shall not cause, or contribute to, a violation of the following:

#### 1. Ammonia

The neutral, unionized ammonia species ( $\text{NH}_3$ ) is highly toxic to freshwater fish. The fraction of toxic  $\text{NH}_3$  to total ammonia species ( $\text{NH}_4^+ + \text{NH}_3$ ) is a function of temperature and pH. Ammonia concentrations shall not exceed the values for the corresponding conditions listed in Tables 3-1 to 3-4 of the Basin Plan.

#### 2. Bacteria, Coliform

Waters shall not contain concentrations of coliform organisms attributable to anthropogenic sources, including human and livestock wastes.

The fecal coliform concentration during any 30-day period shall not exceed a log mean of 20/100 ml, nor shall more than 10 percent of all samples collected during any 30-day period exceed 40/100 ml. *The log mean shall ideally be based on a minimum of not less than five samples collected as evenly spaced as practicable during any 30-day period. However, a log mean concentration exceeding 20/100 ml, or one sample exceeding 40/100ml, for any 30-day period shall indicate violation of this objective even if fewer than five samples were collected.*

3. Biostimulatory Substances

Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.

4. California Toxics Rule Constituents

Waters shall not contain concentrations of CTR constituents in excess of the CTR criterion concentrations listed in General Permit Attachment A. The Minimum Reporting Levels in the Monitoring and Reporting Program (General Permit Attachment C) are for use in reporting and compliance determination in accordance with Section 2.4 of the SIP. These minimum levels shall be used until new values are adopted and become effective.

Discharge categories g, h, and i, in Finding No. 10, are eligible for a categorical exception and do not need to meet CTR/SIP criteria and objectives, provided certain requirements listed in the Notice on Intent (General Permit Attachment D) are fulfilled.

5. Chemical Constituents

Waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in the following provisions of Title 22 of the California Code of Regulations which are incorporated by reference into this plan: Table 64431-A of Section 64431 (Inorganic Chemicals), Table 64431-B of Section 64431 (Fluoride), Table 64444-A of Section 64444 (Organic Chemicals), Table 64449-A of Section 64449 (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits), and Table 64449-B of Section 64449 (Secondary Maximum Contaminant Levels-Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

Waters designated as AGR shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes).

Waters shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses.

6. Chlorine, Total Residual

For the protection of aquatic life, total chlorine residual shall not exceed either a median value of 0.002 mg/L or a maximum value of 0.003 mg/L. Median values shall be based on daily measurements taken within any six-month period.

7. Color

Waters shall be free of coloration that causes nuisance or adversely affects the water for beneficial uses.

8. Dissolved Oxygen

The dissolved oxygen concentration as percent saturation shall not be depressed by more than 10 percent, nor shall the minimum dissolved oxygen concentration be less than 80 percent of saturation.

For waters with the beneficial uses of COLD, COLD with SPWN, WARM, and WARM with SPWN, the minimum dissolved oxygen concentration shall not be less than that specified in Table 3-6 of the Basin Plan.

9. Floating Materials

Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses.

For natural high quality waters, the concentrations of floating material shall not be altered to the extent that such alterations are discernible at the 10 percent significance level.

10. Oil and Grease

Waters shall not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect the water for beneficial uses.

For natural high quality waters, the concentration of oils, greases, or other film or coat generating substances shall not be altered.

11. Nondegradation of Aquatic Communities and Populations

All wetlands shall be free from substances attributable to wastewater or other discharges that produce adverse physiological responses in humans, animals, or plants, or which lead to the presence of undesirable or nuisance aquatic life.

All wetlands shall be free from activities that would substantially impair the biological community as it naturally occurs due to physical, chemical and hydrologic processes.

12. Pesticides

For the purposes of this Basin Plan, pesticides are defined to include insecticides, herbicides, rodenticides, fungicides, pesticides and all other economic poisons. An economic poison is any substance intended to prevent, repel, destroy, or mitigate the damage from insects, rodents, predatory animals, bacteria, fungi or weeds capable of infesting or harming vegetation, humans, or animals (CA Agriculture Code § 12753).

Pesticide concentrations, individually or collectively, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall not be an increase in pesticide concentrations found in bottom sediments. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life.

Waters designated as MUN shall not contain concentrations of pesticides or herbicides in excess of the limiting concentrations as specified in Table 64444-A of Section 64444 (Organic Chemicals) of Title 33 of the California Code of Regulations which is incorporated by reference into the Basin Plan.

13. pH

In fresh waters with designated beneficial uses of COLD or WARM, changes in normal ambient pH levels shall not exceed 0.5 pH units. For all other waters of the Region, the pH shall not be depressed below 6.5 nor raised above 8.5.

*The Water Board recognizes that some waters of the Region may have natural pH levels outside of the 6.5 to 8.5 range. Compliance with the pH objective for these waters will be determined on a case-by-case basis.*

14. Radioactivity

Radionuclides shall not be present in concentrations which are deleterious to human, plant, animal, or aquatic life nor which result in the accumulation of



radionuclides in the food web to an extent which presents a hazard to human, plant, animal, or aquatic life.

Waters shall not contain concentrations of radionuclides in excess of the limits specified in Table 4 of Section 64443 (Radioactivity) of Title 22 of the California Code of Regulations which is incorporated by reference into the Basin Plan.

15. Sediment

The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses.

16. Settleable Materials

Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high quality waters, the concentration of settleable materials shall not be raised by more than 0.1 milliliter per liter.

17. Suspended Materials

Waters shall not contain suspended materials in concentrations that cause nuisance or that adversely affects the water for beneficial uses.

For natural high quality waters, the concentration of total suspended materials shall not be altered to the extent that such alterations are discernible at the 10 percent significance level.

18. Taste and Odor

Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish or other edible products of aquatic origin, that cause nuisance, or that adversely affect the water for beneficial uses. For naturally high quality waters, the taste and odor shall not be altered.

19. Temperature

The natural receiving water temperature of all waters shall not be altered unless it can be demonstrated to the satisfaction of the Water Board that such an alteration in temperature does not adversely affect the water for beneficial uses.

For waters designated WARM, water temperature shall not be altered by more than five degrees Fahrenheit (5°F) above or below the natural temperature. For waters designated COLD, the temperature shall not be altered.

Temperature objectives for COLD interstate waters and WARM interstate waters are as specified in the "Water Quality Control Plan for Control of Temperature in The Coastal and Interstate Waters and Enclosed Bays and Estuaries of California" including any revisions. This plan is summarized in Chapter 6 of the Basin Plan (Plans and Policies), and included in Appendix B of the Basin Plan.

20. Toxicity

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. *Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration and/or other appropriate methods as specified by the Water Board.*

The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge, or when necessary, for other control water that is consistent with the requirements for "experimental water" as defined in the most recent edition of *Standard Methods for the Examination of Water and Wastewater* (American Public Health Association, et al.).

Waters shall not contain concentrations of CTR constituents in excess of the CTR criterion concentrations listed in WDR Attachment A. The Minimum Reporting Levels in the Monitoring and Reporting Program (WDR Attachment C) are for use in reporting and compliance determination in accordance with Section 2.4 of the SIP. These minimum levels shall be used until new values are adopted and become effective.

21. Turbidity

Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity shall not exceed natural levels by more than 10 percent.

**E. Ground Water Limitations**

1. The discharge shall not cause constituent concentrations in the ground water downgradient of the disposal area to exceed water quality objectives for coliform bacteria, or taste and odor, specified in the Basin Plan.
2. The discharge shall not cause the concentration of chemicals and radionuclides in ground water to exceed primary and secondary drinking water limits set forth in Title 22, Division 4, Chapter 15 of the CCR.

## F. Provisions

1. The Discharger must comply with all conditions of this Order, including compliance with Monitoring and Reporting Program (MRP) No. 2008-0023, which is attached to, and made a part of, this Order pursuant to CWC Sections 13267 and 13383. The Discharger must comply with any additional monitoring and reporting requirements as specified by the Executive Officer. Violations may result in enforcement action, including Water Board or court orders requiring corrective action or imposing civil monetary liability, or revoking authorization to discharge under this Order.
2. Individuals and companies that apply for coverage and that are responsible for site operations retain primary responsibility for compliance with these requirements, including day-to-day operations and monitoring.
3. A copy of this Order must be kept at the Discharger's facility or project site where the discharge occurs for reference by operating personnel. Key operating and site management personnel must be familiar with its contents and responsible for compliance.
4. The Discharger must comply with the "Standard Provisions for NPDES Permits" contained in General Permit Attachment B of this Order. This Order expires on **July 23, 2013.**
5. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the authorized Discharger, the Discharger must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which must be immediately forwarded to this Water Board.
6. To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer with a Board Order Transfer Request Form (General Permit Attachment F). Failure to submit the request shall be considered discharge without requirements, a violation of the CWC. Transfer must be approved or disapproved in writing by the Executive Officer.
7. The Discharger must immediately stop any discharge authorized by these requirements in the event there is a violation, or threatened violation, of this General Permit or if the Executive Officer so orders. The Discharger must notify the Water Board as soon as reasonably possible by telephone, with a written confirmation within one week, when a violation of this Order is known to exist. The discharge may not be resumed until authorized in writing by the Executive Officer.

8. The Executive Officer or his or her designee is authorized to issue a single NOA to a Discharger proposing multiple limited threat discharges at multiple locations within the Lahontan Region, provided that the general nature of the discharges and the general locations are reported and included in the application information provided with the NOI for this General Permit.
9. Supplemental information proposing new discharges or discharge locations similar to the discharges and locations authorized in the NOA must be supplied in writing to the Water Board 30 days prior to discharge. If the new discharges or locations are determined not to be a material change to the NOA, the Discharger will be notified to proceed. If the new proposed discharges or locations are determined to be a material change, not within the original scope of the NOA, the Executive Officer may re-issue a modified NOA or the Discharger may be requested to submit a new NOI for this General Permit or an application for a different general or individual permit.

#### **G. Permit Reopening, Revision, Revocation and Re-Issuance**


1. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA, or amendments thereto, the Water Board will revise this General Permit in accordance with such standards.
2. This General Permit may be reopened to address any changes in State or federal plans, policies or regulations that would affect the requirements for the discharges, or to establish effluent limitations, as necessary.
3. This General Permit may be modified, revoked and reissued, or terminated for cause.

#### **H. Rescission of Waste Discharge Requirements**

Board Order No. R6T-2003-0034 is hereby rescinded, except for enforcement purposes, on the effective date of this General Permit.

Dischargers currently enrolled in the General Permit shall remain enrolled when the renewed General Permit becomes effective, unless notified in writing by the Water Board to resubmit a Notice of Intent. All dischargers currently enrolled in the General Permit will be notified upon adoption and reissuance.

I, Harold J. Singer, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the Water Board, on July 23, 2008.

  
HAROLD J. SINGER  
EXECUTIVE OFFICER

Attachments:

- A. California Toxics Rule Objectives for Priority Pollutants
- B. Standard Provisions for NPDES Permits
- C. Monitoring and Reporting Program No. 2008-0023
- D. Notice of Intent
- E. Best Management Practices Plan
- F. Board Order Transfer Request Form

# Attachment A

## CTR Objectives for Priority Pollutants

| CTR #                    | Constituent                        | CAS Number | Water Quality Objective, ug/l |
|--------------------------|------------------------------------|------------|-------------------------------|
| <b>INORGANICS</b>        |                                    |            |                               |
| 1                        | Antimony                           | 7440360    | 14                            |
| 2                        | Arsenic                            | 7440382    | 150                           |
| 15                       | Asbestos                           | 1332214    | 7 MFL                         |
| 3                        | Beryllium                          | 7440417    |                               |
| 4                        | Cadmium                            | 7440439    | 4.3 (a)                       |
| 5a                       | Chromium (III)                     | 7440473    | 550 (a)                       |
| 5b                       | Chromium (VI)                      | 18540299   | 180                           |
| 6                        | Copper                             | 7440508    | 4.1 (a)                       |
| 14                       | Cyanide                            | 57125      | 5.2                           |
| 7                        | Lead                               | 7439921    | 65 (a)                        |
| 8                        | Mercury                            | 7439976    |                               |
| 9                        | Nickel                             | 7440020    | 470 (a)                       |
| 10                       | Selenium                           | 7782492    | 5                             |
| 11                       | Silver                             | 7440224    | 3.4 (a)                       |
| 12                       | Thallium                           | 7440280    | 1.7                           |
| 13                       | Zinc                               | 7440666    | 120 (a)                       |
| <b>VOLATILE ORGANICS</b> |                                    |            |                               |
| 28                       | 1,1-Dichloroethane                 | 75343      |                               |
| 30                       | 1,1-Dichloroethene                 | 75354      | 0.057                         |
| 41                       | 1,1,1-Trichloroethane              | 71556      |                               |
| 42                       | 1,1,2-Trichloroethane              | 79005      | 0.6                           |
| 37                       | 1,1,2,2-Tetrachloroethane          | 79345      | 0.17                          |
| 75                       | 1,2-Dichlorobenzene                | 95501      | 2,700                         |
| 29                       | 1,2-Dichloroethane                 | 107062     | 0.38                          |
| 31                       | 1,2-Dichloropropane                | 78875      | 0.52                          |
| 101                      | 1,2,4-Trichlorobenzene             | 120821     |                               |
| 76                       | 1,3-Dichlorobenzene                | 541731     | 400                           |
| 32                       | 1,3-Dichloropropene                | 542756     | 10                            |
| 77                       | 1,4-Dichlorobenzene                | 106467     | 400                           |
| 17                       | Acrolein                           | 107028     | 320                           |
| 18                       | Acrylonitrile                      | 107131     | 0.059                         |
| 19                       | Benzene                            | 71432      | 1.2                           |
| 20                       | Bromoform                          | 75252      | 4.3                           |
| 34                       | Bromomethane                       | 74839      | 48                            |
| 21                       | Carbon tetrachloride               | 56235      | 0.25                          |
| 22                       | Chlorobenzene (mono chlorobenzene) | 108907     | 680                           |
| 24                       | Chloroethane                       | 75003      |                               |
| 25                       | 2- Chloroethyl vinyl ether         | 110758     |                               |
| 26                       | Chloroform                         | 67663      | 0.56                          |
| 35                       | Chloromethane                      | 74873      |                               |
| 23                       | Dibromochloromethane               | 124481     | 0.401                         |
| 27                       | Dichlorobromomethane               | 75274      | 0.56                          |

| CTR #                         | Constituent                      | CAS Number | Water Quality Objective, ug/l |
|-------------------------------|----------------------------------|------------|-------------------------------|
| 36                            | Dichloromethane                  | 75092      | 4.7                           |
| 33                            | Ethylbenzene                     | 100414     | 3,100                         |
| 88                            | Hexachlorobenzene                | 118741     | 0.00075                       |
| 89                            | Hexachlorobutadiene              | 87683      | 0.44                          |
| 91                            | Hexachloroethane                 | 67721      | 1.9                           |
| 94                            | Naphthalene                      | 91203      |                               |
| 38                            | Tetrachloroethene                | 127184     | 0.8                           |
| 39                            | Toluene                          | 108883     | 6,800                         |
| 40                            | trans-1,2-Dichloroethylene       | 156605     | 700                           |
| 43                            | Trichloroethene                  | 79016      | 2.7                           |
| 44                            | Vinyl chloride                   | 75014      | 2                             |
| <b>SEMI-VOLATILE ORGANICS</b> |                                  |            |                               |
| 60                            | 1,2-Benzanthracene               | 56553      | 0.0044                        |
| 85                            | 1,2-Diphenylhydrazine            | 122667     | 0.04                          |
| 45                            | 2-Chlorophenol                   | 95578      | 120                           |
| 46                            | 2,4-Dichlorophenol               | 120832     | 93                            |
| 47                            | 2,4-Dimethylphenol               | 105679     | 540                           |
| 49                            | 2,4-Dinitrophenol                | 51285      | 70                            |
| 82                            | 2,4-Dinitrotoluene               | 121142     | 0.11                          |
| 55                            | 2,4,6-Trichlorophenol            | 88062      | 2.1                           |
| 83                            | 2,6-Dinitrotoluene               | 606202     |                               |
| 50                            | 2-Nitrophenol                    | 25154557   |                               |
| 71                            | 2-Chloronaphthalene              | 91587      |                               |
| 78                            | 3,3'-Dichlorobenzidine           | 91941      | 0.04                          |
| 62                            | 3,4-Benzofluoranthene            | 205992     | 0.0044                        |
| 52                            | 4-Chloro-3-methylphenol          | 59507      |                               |
| 48                            | 4,6-Dinitro-2-methylphenol       | 534521     | 13.4                          |
| 51                            | 4-Nitrophenol                    | 100027     |                               |
| 69                            | 4-Bromophenyl phenyl ether       | 101553     |                               |
| 72                            | 4-Chlorophenyl phenyl ether      | 7005723    |                               |
| 56                            | Acenaphthene                     | 83329      | 1,200                         |
| 57                            | Acenaphthylene                   | 208968     |                               |
| 58                            | Anthracene                       | 120127     | 9,600                         |
| 59                            | Benzidine                        | 92875      | 0.00012                       |
| 61                            | Benzo(a)pyrene (3,4-Benzopyrene) | 50328      | 0.0044                        |
| 63                            | Benzo(g,h,i)perylene             | 191242     |                               |
| 64                            | Benzo(k)fluoranthene             | 207089     | 0.0044                        |
| 65                            | Bis(2-chloroethoxy) methane      | 111911     |                               |
| 66                            | Bis(2-chloroethyl) ether         | 111444     | 0.031                         |
| 67                            | Bis(2-chloroisopropyl) ether     | 39638329   | 1,400 (b)                     |
| 68                            | Bis(2-ethylhexyl) phthalate      | 117817     | 1.8                           |
| 70                            | Butyl benzyl phthalate           | 85687      | 3,000 (c )                    |
| 73                            | Chrysene                         | 218019     | 0.0044                        |
| 81                            | Di-n-butylphthalate              | 84742      | 2,700 (c )                    |
| 84                            | Di-n-octylphthalate              | 117840     |                               |
| 74                            | Dibenzo(a,h)-anthracene          | 53703      | 0.0044                        |

| CTR #                    | Constituent                           | CAS Number | Water Quality Objective, ug/l |
|--------------------------|---------------------------------------|------------|-------------------------------|
| 79                       | Diethyl phthalate                     | 84662      | 23,000 (c )                   |
| 80                       | Dimethyl phthalate                    | 131113     | 313,000 (c )                  |
| 86                       | Fluoranthene                          | 206440     | 300                           |
| 87                       | Fluorene                              | 86737      | 1,300                         |
| 90                       | Hexachlorocyclopentadiene             | 77474      | 240                           |
| 92                       | Indeno(1,2,3-c,d)pyrene               | 193395     | 0.0044                        |
| 93                       | Isophorone                            | 78591      | 8.4                           |
| 98                       | N-Nitrosodiphenylamine                | 86306      | 5                             |
| 96                       | N-Nitrosodimethylamine                | 62759      | 0.00069                       |
| 97                       | N-Nitrosodi-n-propylamine             | 621647     | 0.005                         |
| 95                       | Nitrobenzene                          | 98953      | 17                            |
| 53                       | Pentachlorophenol                     | 87865      | 0.28                          |
| 99                       | Phenanthrene                          | 85018      |                               |
| 54                       | Phenol                                | 108952     | 21,000                        |
| 100                      | Pyrene                                | 129000     | 960                           |
| <b>PESTICIDES - PCBs</b> |                                       |            |                               |
| 110                      | 4,4'-DDD                              | 72548      | 0.00083                       |
| 109                      | 4,4'-DDE                              | 72559      | 0.00059                       |
| 108                      | 4,4'-DDT                              | 50293      | 0.00059                       |
| 112                      | alpha-Endosulfan                      | 959988     | 0.056 (d)                     |
| 103                      | alpha-Hexachlorocyclohexane (BHC)     | 319846     | 0.0039                        |
| 102                      | Aldrin                                | 309002     | 0.00013                       |
| 113                      | beta-Endosulfan                       | 33213659   | 0.056 (d)                     |
| 104                      | beta-Hexachlorocyclohexane            | 319857     | 0.014                         |
| 107                      | Chlordane                             | 57749      | 0.00057                       |
| 106                      | delta-Hexachlorocyclohexane           | 319868     |                               |
| 111                      | Dieldrin                              | 60571      | 0.00014                       |
| 114                      | Endosulfan sulfate                    | 1031078    | 110                           |
| 115                      | Endrin                                | 72208      | 0.036                         |
| 116                      | Endrin Aldehyde                       | 7421934    | 0.76                          |
| 117                      | Heptachlor                            | 76448      | 0.00021                       |
| 118                      | Heptachlor Epoxide                    | 1024573    | 0.0001                        |
| 105                      | Lindane (gamma-Hexachlorocyclohexane) | 58899      | 0.019                         |
| 119                      | PCB-1016                              | 12674112   | 0.00017 (e)                   |
| 120                      | PCB-1221                              | 11104282   | 0.00017 (e)                   |
| 121                      | PCB-1232                              | 11141165   | 0.00017 (e)                   |
| 122                      | PCB-1242                              | 53469219   | 0.00017 (e)                   |
| 123                      | PCB-1248                              | 12672296   | 0.00017 (e)                   |
| 124                      | PCB-1254                              | 11097691   | 0.00017 (e)                   |
| 125                      | PCB-1260                              | 11096825   | 0.00017 (e)                   |
| 126                      | Toxaphene                             | 8001352    | 0.0002                        |
| 16                       | 2,3,7,8-TCDD (Dioxin)                 | 1746016    | 0.000000013                   |

(a) Criteria is a function of hardness (mg/L) in the water body. Values for a hardness of 100 mg/L.

(b) for haloethers

(c ) for phthalate esters

(d) sum of alpha- and beta- forms      (e) criteria for sum of all PCBs



**ATTACHMENT B**

**STANDARD PROVISIONS**

**FOR**

**NATIONAL POLLUTANT DISCHARGE**

**ELIMINATION SYSTEM (NPDES) PERMITS**

1. The permittee must comply with all of the terms, requirements, and conditions of this NPDES Permit. Any violation of this Permit constitutes violation of the Clean Water Act (CWA), its regulations and the California Water Code, and is grounds for enforcement action, permit termination, permit revocation, and reissuance, denial of an application for permit reissuance; or a combination thereof.
2. The permittee shall comply with effluent standards or prohibitions established under 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Permit has not yet been modified to incorporate the requirement. [40 CFR 122.41(a)(1)]

The California Water Code provides that any person who violates a Waste Discharge Requirement (same as permit condition), or a provision of the California Water Code, is subject to civil penalties of up to \$1,000 per day or \$10,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$20 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

Violations of any of the provisions of the NPDES program, or of any of the provisions of this Permit, may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

3. The CWA provides that any person who violates a Permit condition implementing Sections 301, 302, 306, 307, or 308 of the CWA is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates Permit conditions implementing these Sections of the CWA is subject to a fine of not less than \$2,500, nor more than \$25,000 per day of violation, or by imprisonment for not more than two years, or both. [40 CFR 122.41(a)(2)]
4. If the permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the permittee must apply for and obtain a new Permit. [40 CFR 122.41(b)]
5. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit. [40 CFR 122.41(c)]

6. The permittee shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting health or the environment. [40 CFR 122.41(d)]
7. The permittee shall, at all times, properly operate and maintain all the facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with this Permit.

Proper operation and maintenance includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities, or similar systems that are installed by a permittee only when necessary to achieve compliance with the conditions of this Permit. [40 CFR 122.41(e)]

8. This Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 122.41(g)]
9. This Permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 122.41(f)]
10. The permittee shall furnish, within a reasonable time, any information the Water Board or United States Environmental Protection Agency (USEPA) may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit. The permittee shall also furnish to the Water Board, upon request, copies of records required to be kept by this Permit. [40 CFR 122.41(h)]
11. The Water Board, USEPA, and other authorized representatives shall be allowed:
  - (a) Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Permit;
  - (b) Access to copy any records that are kept under the conditions of this Permit;
  - (c) To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
  - (d) To photograph, sample, and monitor for the purpose of assuring compliance with this Permit, or as otherwise authorized by the CWA. [40 CFR 122.41(I)]
12. Monitoring and records.
  - (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

- (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the Water Board or USEPA at any time.
  - (c) Records of monitoring information shall include:
    - (i) The date, exact place, and time of sampling or measurements;
    - (ii) The individual(s) who performed the sampling or measurements;
    - (iii) The date(s) analyses were performed;
    - (iv) The individual(s) who performed the analyses;
    - (v) The analytical techniques or methods used; and
    - (vi) The results of such analyses.
  - (d) Monitoring must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this Permit.
  - (e) The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device, or method required to be maintained under this Permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both. [40 CFR 122.41(j)]
13. All applications, reports, or information submitted to the Water Board shall be signed and certified in accordance with 40 CFR 122.22 [40 CFR 122.41(k)(1)]
14. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both. [40 CFR 122.41(k)(2)]
15. Reporting requirements:
- (a) The permittee shall give advance notice to the Water Board, as soon as possible of, any planned physical alterations, or additions to the permitted facility.
  - (b) The permittee shall give advance notice to the Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

- (c) This Permit is not transferable to any person, except after notice to the Water Board. The Water Board may require modification, or revocation and reissuance of the Permit to change the name of the permittee, and incorporate such other requirements as may be necessary under the CWA.
- (d) Monitoring results shall be reported at the intervals specified elsewhere in this Permit.
  - (i) Monitoring results must be reported in a Discharge Monitoring Report (DMR).
  - (ii) If the permittee monitors any pollutant more frequently than required by this Permit using test procedures approved under 40 CFR Part 136 or as specified in this Permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
  - (iii) Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Permit. If no averaging period is specified, all data collected during the previous twelve months shall be averaged.
- (e) Report of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 14 days following each schedule date.
- (f) Twenty-four hour reporting.
  - (i) The permittee shall report any noncompliance that may endanger health or the environment to the Water Board. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
  - (ii) The following shall be included as information that must be reported within 24 hours under this paragraph;
    - (A) Any unanticipated bypass that exceeds any effluent limitation in the Permit.
    - (B) Any upset that exceeds any effluent limitation in the Permit.
    - (C) Violation of a maximum daily discharge limitation for any of the pollutants listed in this Permit to be reported within 24 hours.

- (iii) The Water Board may waive the above-required written report on a case-by-case basis.
  - (g) The permittee shall report all instances of noncompliance, not otherwise reported under the above paragraphs, at the time monitoring reports are submitted. The reports shall contain all information listed in paragraph 15(f) above.[40 CFR 122.41(1)]
- 16. Bypass (the intentional diversion of waste streams from any portion of facility) is prohibited. The Water Board may take enforcement action against the permittee for bypass unless:
  - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.);
  - (b) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and
  - (c) The permittee submitted a notice, at least ten days in advance, of the need for a bypass to the appropriate Board.

The permittee may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable.

The permittee shall submit notice of an unanticipated bypass as required in paragraph 15(f) above. [40 CFR 122.41(m)]
- 17. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper action. A permittee that wishes to establish the affirmative defense of an upset in an action brought for noncompliance shall demonstrate, through signed, contemporaneous operating logs, or other relevant evidence that:

- (a) an upset occurred and that the permittee can identify the cause(s) of the upset;
- (b) the permitted facility was being properly operated at the time of the upset;
- (c) the permittee submitted notice of the upset as required in paragraph 15(f) above;  
and
- (d) the permittee complied with any remedial measures required under paragraph 7.

No determination made before an action for noncompliance, such as during administrative review of claims that noncompliance was caused by an upset; is final administrative action subject to judicial review.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof. [40 CFR 122.41(n)]

18. All existing manufacturing, commercial, mining, and silvicultural Dischargers must notify the Water Board as soon as they know or have reason to believe:

- (a) that any activity has occurred or will occur that would result in the discharge of any toxic pollutant that is not limited in this Permit, if that discharge will exceed the highest of the following "notification levels:"
  - (i) One hundred micrograms per liter (100 µg/L);
  - (ii) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2-4dinitrophenol and 2-methyl-4-b-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
  - (iii) Five (5) times the maximum concentration value reported for that pollutant in the Permit application; or
  - (iv) The level established by the Water Board in accordance with 40 CFR 122.44(f).
- (b) that they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant that was not reported in the Permit application. [40 CFR 122]

ATTACHMENT C

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

MONITORING AND REPORTING PROGRAM NO. 2008-0023

NPDES NO. CAG996001

FOR

RENEWED WASTE DISCHARGE REQUIREMENTS AND  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
GENERAL PERMIT FOR  
LIMITED THREAT DISCHARGES TO SURFACE WATERS

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A. MONITORING

This monitoring program includes both discharge and receiving water sampling. Discharge samples shall be collected from the waste stream or effluent outfall. Discharge samples shall be representative of the discharge. Representative sampling of multiple discharges is acceptable when multiple discharges are authorized in the NOA.

Sampling and analysis frequencies are specified below. The Water Board may require more frequent sampling and analyses for some discharges. Sample collection time(s) shall be recorded whenever samples are collected.

1. Flow Monitoring

The Discharger shall monitor the flow rate and calculate the average daily flow rate of the discharge during the entire period of the discharge. A log of all startup and shutdown times shall also be maintained. The flow rate, duration, and total volume shall be monitored and reported. Flow estimates are acceptable provided that the basis for the estimate is clearly indicated with the monitoring reports.

2. Discharge Monitoring

- a. Discharge monitoring shall be conducted based on the category of the discharge, as described in Finding No. 10 of this General Permit. Beginning within the first hour of any discharge and continuing throughout the period of discharge, grab samples of the discharge shall be collected at, or as near as possible to, the discharge point and analyzed as follows (in Table 1):

**TABLE 1 – DISCHARGE SAMPLING AND ANALYSIS REQUIREMENTS**

| <u>Constituent</u>                  | <u>Finding No.</u><br><u>10 Discharge</u><br><u>Category</u> | <u>Units</u> | <u>Reporting</u><br><u>Limit</u> | <u>Frequency</u>     | <u>Lab/</u><br><u>Field</u> |
|-------------------------------------|--|--------------|----------------------------------|----------------------|-----------------------------|
| Turbidity                           | a-j  | NTU          | 0.2 NTU                          | Daily <sup>1</sup>   | Field                       |
| Specific Conductance                | b-j  | µmho/cm      | 10 µmho/cm                       | Daily                | Field                       |
| pH                                  | b-j  | pH           | 0.1 pH unit                      | Daily                | Field                       |
| Temperature                         | b-j  | °C           | 1 °C                             | Monthly              | Field                       |
| Total Dissolved Solids              | b-j  | mg/l         | 10 mg/l                          | Monthly              | Lab                         |
| Total Suspended Solids              | b-j  | mg/l         | 1 mg/l                           | Monthly              | Lab                         |
| Total Nitrogen                      | b-j  | mg/l         | 0.1 mg/l                         | Monthly <sup>2</sup> | Lab                         |
| Total Phosphorus                    | b-j  | mg/l         | 0.01 mg/l <sup>3</sup>           | Monthly <sup>2</sup> | Lab                         |
| Total Iron                          | b-j  | mg/l         | 0.1 mg/l                         | Monthly              | Lab                         |
| Total Residual Chlorine             | g-j  | mg/l         | 0.1 mg/l                         | Monthly              | Field                       |
| TPH – Gasoline Range <sup>4,5</sup> | b,c,d,e, j   | µg/l         | 50 µg/l                          | Once                 | Lab                         |
| TPH – Diesel Range <sup>4,5</sup>   | b,c,d,e, j   | µg/l         | 50 µg/l                          | Once                 | Lab                         |
| BTEX + Oxygenates <sup>4,5</sup>    | b,c,d,e, j   | µg/l         | 0.5 µg/l                         | Once                 | Lab                         |

<sup>1</sup> For discharges in the Lake Tahoe or Truckee River Hydrologic Units, the frequency for Turbidity may be required more frequently than daily.

<sup>2</sup> For discharges in the Lake Tahoe Hydrologic Unit, the frequency for Total Nitrogen and Total Phosphorus is daily.

<sup>3</sup> For discharges in the Lake Tahoe Hydrologic Unit, the reporting limit for Total Phosphorus is 0.008 mg/l.

<sup>4</sup> Sampling and analysis for organic constituents in discharges from wells (Category e) is only required if the well is within 1000' of an underground or above-ground petroleum storage tank. Sampling and analysis for organic constituents in discharges from dewatering activities and hydrostatic testing of non-potable conveyances (Categories b, c, d, and j) is always required a minimum of one time. Test method for TPH gasoline range shall be EPA Method 8015/8021. Test method for TPH diesel range shall be EPA Method 8015 modified. Test method for BTEX and oxygenates shall be EPA Method 8260 or equivalent.

<sup>5</sup> TPH means Total Petroleum Hydrocarbons; BTEX means Benzene, Toluene, Ethylbenzene and Xylene. Oxygenates include Tertiary Butyl Alcohol (TBA), Methyl Tertiary Butyl Ether (MTBE), Di-isopropyl Ether (DIPE), Ethyl Tertiary Butyl Ether (ETBE), and Tertiary Amyl Methyl Ether (TAME).



- b. For Discharge Categories d, e, f in Finding No. 10, samples will be obtained and analyzed for the constituents listed in Table 2 if either of two conditions are met: 1) laboratory determines that the total dissolved solids (TDS) is high (greater than 500 mg/l) or 2) the field measurement of temperature is greater than 25°C.

**TABLE 2 – DISCHARGE SAMPLING AND ANALYSIS REQUIREMENTS  
FOR GROUND WATER SOURCES WITH  
HIGH TOTAL DISSOLVED SOLIDS  
OR HIGH TEMPERATURES**

| <u>Constituent</u> | <u>Finding No.<br/>10 Discharge<br/>Category</u> | <u>Units</u> | <u>Reporting<br/>Limit</u> | <u>Frequency</u> | <u>Lab/<br/>Field</u> |
|--------------------|--|--------------|----------------------------|------------------|-----------------------|
| Aluminum           | d, e, f  | µg/l         | 50 µg/l                    | Once             | Lab                   |
| Antimony           | d, e, f  | µg/l         | 6 µg/l                     | Once             | Lab                   |
| Arsenic            | d, e, f  | µg/l         | 2 µg/l                     | Once             | Lab                   |
| Barium             | d, e, f  | µg/l         | 100 µg/l                   | Once             | Lab                   |
| Beryllium          | d, e, f  | µg/l         | 1 µg/l                     | Once             | Lab                   |
| Cadmium            | d, e, f  | µg/l         | 1 µg/l                     | Once             | Lab                   |
| Calcium            | d, e, f  | µg/l         | 1000 µg/l                  | Once             | Lab                   |
| Chromium           | d, e, f  | µg/l         | 10 µg/l                    | Once             | Lab                   |
| Cobalt             | d, e, f  | µg/l         | 20 µg/l                    | Once             | Lab                   |
| Copper             | d, e, f  | µg/l         | 50 µg/l                    | Once             | Lab                   |
| Lead               | d, e, f  | µg/l         | 5 µg/l                     | Once             | Lab                   |
| Magnesium          | d, e, f  | µg/l         | 1000 µg/l                  | Once             | Lab                   |
| Manganese          | d, e, f  | µg/l         | 20 µg/l                    | Once             | Lab                   |
| Molybdenum         | d, e, f  | µg/l         | 20 µg/l                    | Once             | Lab                   |
| Nickel             | d, e, f  | µg/l         | 10 µg/l                    | Once             | Lab                   |
| Selenium           | d, e, f  | µg/l         | 5 µg/l                     | Once             | Lab                   |
| Silver             | d, e, f  | µg/l         | 10 µg/l                    | Once             | Lab                   |
| Thallium           | d, e, f  | µg/l         | 1 µg/l                     | Once             | Lab                   |
| Vanadium           | d, e, f  | µg/l         | 20 µg/l                    | Once             | Lab                   |
| Zinc               | d, e, f  | µg/l         | 50 µg/l                    | Once             | Lab                   |
| Sulfides           | d, e, f  | µg/l         | 100 µg/l                   | Once             | Lab                   |

3. Receiving Water Monitoring

- a. Receiving water sampling stations shall be located appropriately to monitor the quality of waters unaffected by the discharge and waters affected by the discharge. In general, locations should be 50 feet upstream of, and 50 feet downstream of, the discharge. The initial sample shall be taken within two hours of the first discharge to the surface water. Samples shall be analyzed for the following:

**TABLE 3 – RECEIVING WATER SAMPLING AND ANALYSIS REQUIREMENTS**

| <u>Constituent</u>      | <u>Finding No.</u><br><u>10 Discharge</u><br><u>Category</u> | <u>Units</u> | <u>Reporting</u><br><u>Limit</u> | <u>Frequency</u> | <u>Lab/</u><br><u>Field</u> |
|-------------------------|--|--------------|----------------------------------|------------------|-----------------------------|
| Turbidity               | a-j  | NTU          | 0.2 NTU                          | Daily            | Field                       |
| Specific Conductance    | b-j  | µmho/cm      | 10 µmho/cm                       | Daily            | Field                       |
| pH                      | b-j  | pH           | .1 pH unit                       | Daily            | Field                       |
| Temperature             | b-j  | °C           | 1 °C                             | Monthly          | Field                       |
| Total Dissolved Solids  | b-j  | mg/l         | 10 mg/l                          | Monthly          | Lab                         |
| Total Suspended Solids  | b-j  | mg/l         | 1 mg/l                           | Monthly          | Lab                         |
| Total Nitrogen          | b-j  | mg/l         | 0.1 mg/l                         | Monthly          | Lab                         |
| Total Phosphorus        | b-j  | mg/l         | 0.01 mg/l <sup>1</sup>           | Monthly          | Lab                         |
| Total Iron              | b-j  | mg/l         | 0.05 mg/l                        | Monthly          | Lab                         |
| Total Residual Chlorine | g-j  | mg/l         | 0.1 mg/l                         | Monthly          | Field                       |

<sup>1</sup> For discharges in the Lake Tahoe Hydrologic Unit, the reporting limit for Total Phosphorus is 0.008 mg/l.

- b. In conducting the receiving water sampling, a log shall be kept of the visual condition of the surface water for every sampling event and shall record the presence or absence of:
- i. Floating or suspended matter
  - ii. Coloration
  - iii. Visible films, sheens, or coatings
  - iv. Odors
  - v. Aquatic life
  - vi. Algae, fungi, slimes or other aquatic vegetation
  - vii. Erosion
  - viii. Sedimentation
  - ix. Other factors affecting water quality not noted above.

4. Analysis of Samples

All analyses shall be performed in accordance with the most recent edition of *Standard Methods for the Examination of Water and Wastewater*, and in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Executive Officer.

5. Interim Monitoring Requirements for CTR Compliance

Discharges and receiving waters shall be sampled and analyzed for priority pollutants. Representative samples shall be collected to evaluate whether additional water quality-based effluent limitations are required.

Discharge categories g, h, and i in Finding 10 of the General Permit are covered by categorical exception to this interim monitoring requirement.

The discharge and receiving water shall be analyzed for the constituents listed in Table 4. Specific CTR constituents to be monitored and suggested test methods are listed in the Attachments with Minimum Levels (MLs) for reporting and CTR compliance determination.

**TABLE 4 – INTERIM MONITORING REQUIREMENTS FOR CTR COMPLIANCE**

| <u>Constituents</u>    | <u>Finding No.<br/>10 Discharge<br/>Category</u> | <u>Sample<br/>Type</u> | <u>Reporting<br/>Limit</u> | <u>Lab/<br/>Frequency</u> | <u>Field</u> |
|------------------------|--|------------------------|----------------------------|---------------------------|--------------|
| Volatile Organics      | a-f, j   | Grab                   | Attachment                 | Once                      | Lab          |
| Semi-Volatile Organics | a-f, j   | Grab or<br>Composite   | Attachment                 | Once                      | Lab          |
| Inorganics             | a-f, j   | Grab or<br>Composite   | Attachment                 | Once                      | Lab          |
| Pesticides & PCBs      | a-f, j   | Grab or<br>Composite   | Attachment                 | Once                      | Lab          |
| Dioxin                 | a-f, j   | Grab                   | Attachment                 | Once                      | Lab          |

**B. REPORTING****1. General Provisions**

The Discharger shall comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made a part of this Monitoring and Reporting Program.

**2. Report Format**

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations and the sampling points are readily discernible. Original lab and field data sheets (or photocopies) shall also be included. The report shall contain contact information for a person who can answer questions regarding the details of the report.

In all monitoring reports provided to the Water Board the Discharger shall clearly identify any violations or shall certify that no violations occurred. For every item where the requirements are not met, the Discharger shall submit a statement of actions taken or proposed which will bring the discharge into full compliance with the requirements at the earliest time and submit a timetable for completion.

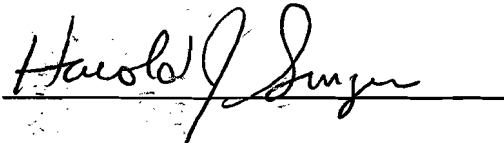
**3. Submittal Periods**

- a. Quarterly reports containing the information specified above shall be received by the appropriate Water Board office by the due date following each monitoring period:

**TABLE 5 – DUE DATES FOR QUARTERLY REPORTS**

| <u>Monitoring Period</u> | <u>Due Date</u> |
|--------------------------|-----------------|
| January 1 – March 31     | April 21        |
| April 1 – June 30        | July 21         |
| July 1 – September 30    | October 21      |
| October 1 – December 31  | January 21      |

- b. When the duration of a project is less than 30 days, reporting of laboratory and field data within 48 hours of sampling may be required. Requirements to report data more often than quarterly will be decided on a case-by-case basis depending on the nature of the discharge and the duration of the project and will be addressed in the NOA issued for the project.

Date: July 23, 2008HAROLD J. SINGER  
EXECUTIVE OFFICER

- Attachments: 1. General Provisions for Monitoring and Reporting  
2. CTR Constituents To Be Monitored  
3. Dioxin and Furan CTR Sampling  
4. Reporting Requirements for CTR Monitoring

## ATTACHMENT 1

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

#### **GENERAL PROVISIONS** FOR MONITORING AND REPORTING

##### 1. SAMPLING AND ANALYSIS

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
  - i. Standard Methods for the Examination of Water and Wastewater
  - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board Executive Officer prior to use.
- d. The discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.

- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

## 2. OPERATIONAL REQUIREMENTS

### a. Sample Results

Pursuant to California Water Code Section 13267(b), the discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

### b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

## 3. REPORTING

- a. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each

monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.

- d. Monitoring reports shall be signed by:
  - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
  - ii. In the case of a partnership, by a general partner;
  - iii. In the case of a sole proprietorship, by the proprietor; or
  - iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- i. Name and telephone number of individual who can answer questions about the report.
- ii. The Monitoring and Reporting Program Number.
- iii. WDID Number.
- e. Monitoring reports are to include the following:
- f. Modifications

This Monitoring and Reporting Program may be increased at the discretion of the Regional Board Executive Officer.

#### 4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.



## Attachment 2 - CTR Constituents To Be Monitored

|                   |                  |            | Controlling Water Quality Criterion for Surface Waters |   |   |                        |
|-------------------|------------------|------------|--|---|---|------------------------|
| CTR #             | Constituent      | CAS Number | Basis  | Criterion Concentration(1 (ug/L or noted) | Minimum Reporting Level (ug/L or noted) | Suggested Test Methods |
| <b>INORGANICS</b> |                  |            |  |   |   |                        |
| 1                 | Antimony         | 7440360    | Primary MCL  | 6   | 5                                       | EPA 6020/200.8         |
| 2                 | Arsenic          | 7440382    | Ambient Water Quality                                  | 0.018                                     | 1                                       | EPA 6020/Hydride       |
| 15                | Asbestos         | 1332214    | National Toxics Rule/<br>Primary MCL                   | 7 MFL                                     | 0.2 MFL<br>>10um                        | EPA/600/R-93/116(PCM)  |
| 3                 | Beryllium        | 7440417    | Primary MCL  | 4   | 1                                       | EPA 6020/200.8         |
| 4                 | Cadmium          | 7440439    | Public Health Goal                                     | 0.07                                      | 0.25                                    | EPA 1638/200.8         |
| 5a                | Chromium (total) | 7440473    | Primary MCL  | 50  | 2                                       | EPA 6020/200.8         |
| 5b                | Chromium (VI)    | 18540299   | Public Health Goal                                     | 0.2                                       | 5                                       | EPA 7199/<br>1636      |
| 6                 | Copper           | 7440508    | National Toxics Rule                                   | 4.1 (6)                                   | 0.5                                     | EPA 6020/200.8         |
| 14                | Cyanide          | 57125      | National Toxics Rule                                   | 5.2                                       | 5                                       | EPA 9012A              |
| 7                 | Lead             | 7439921    | Calif. Toxics Rule                                     | 0.92 (6)                                  | 0.5                                     | EPA 1638               |
| 8                 | Mercury          | 7439976    | National Toxics Rule                                   |   | 0.0005                                  | EPA 1669/1631          |
| 9                 | Nickel           | 7440020    | Calif. Toxics Rule                                     | 24 (6)                                    | 5                                       | EPA 6020/200.8         |
| 10                | Selenium         | 7782492    | Calif. Toxics Rule                                     | 5   | 5                                       | EPA 6020/200.8         |
| 11                | Silver           | 7440224    | Calif. Toxics Rule                                     | 0.71 (6)                                  | 1                                       | EPA 6020/200.8         |
| 12                | Thallium         | 7440280    | National Toxics Rule                                   | 1.7                                       | 1                                       | EPA 6020/200.8         |
| 13                | Zinc             | 7440666    | Calif. Toxics Rule                                     | 54/ 16 (6)                                | 10                                      | EPA 6020/200.8         |

|                          |                           |        |                      |       |     |           |
|--------------------------|---------------------------|--------|----------------------|-------|-----|-----------|
| <b>VOLATILE ORGANICS</b> |                           |        |                      |       |     |           |
| 28                       | 1,1-Dichloroethane        | 75343  | Primary MCL          | 5     | 1   | EPA 8260B |
| 30                       | 1,1-Dichloroethene        | 75354  | National Toxics Rule | 0.057 | 0.5 | EPA 8260B |
| 41                       | 1,1,1-Trichloroethane     | 71556  | Primary MCL          | 200   | 2   | EPA 8260B |
| 42                       | 1,1,2-Trichloroethane     | 79005  | National Toxics Rule | 0.6   | 0.5 | EPA 8260B |
| 37                       | 1,1,2,2-Tetrachloroethane | 79345  | National Toxics Rule | 0.17  | 0.5 | EPA 8260B |
| 75                       | 1,2-Dichlorobenzene       | 95501  | Taste & Odor         | 10    | 2   | EPA 8260B |
| 29                       | 1,2-Dichloroethane        | 107062 | National Toxics Rule | 0.38  | 0.5 | EPA 8260B |
| 31                       | 1,2-Dichloropropane       | 78875  | Calif. Toxics Rule   | 0.52  | 0.5 | EPA 8260B |
| 101                      | 1,2,4-Trichlorobenzene    | 120821 | Public Health Goal   | 5     | 5   | EPA 8260B |

|       |                                    |            | Controlling Water Quality Criterion for Surface Waters |  |   |                        |
|-------|------------------------------------|------------|--|--|---|------------------------|
| CTR # | Constituent                        | CAS Number | Basis  | Criterion Concentration(1 ug/L or noted) | Minimum Reporting Level (ug/L or noted) | Suggested Test Methods |
| 76    | 1,3-Dichlorobenzene                | 541731     | Taste & Odor   | 10                                       | 2                                       | EPA 8260B              |
| 32    | 1,3-Dichloropropene                | 542756     | Primary MCL  | 0.5                                      | 0.5                                     | EPA 8260B              |
| 77    | 1,4-Dichlorobenzene                | 106467     | Primary MCL  | 5  | 2                                       | EPA 8260B              |
| 17    | Acrolein                           | 107028     | Aquatic Toxicity                                       | 21                                       | 5                                       | EPA 8260B              |
| 18    | Acrylonitrile                      | 107131     | National Toxics Rule                                   | 0.059                                    | 2                                       | EPA 8260B              |
| 19    | Benzene                            | 71432      | Primary MCL  | 1  | 0.5                                     | EPA 8260B              |
| 20    | Bromoform                          | 75252      | Calif. Toxics Rule                                     | 4.3                                      | 2                                       | EPA 8260B              |
| 34    | Bromomethane                       | 74839      | Calif. Toxics Rule                                     | 48                                       | 2                                       | EPA 8260B              |
| 21    | Carbon tetrachloride               | 56235      | National Toxics Rule                                   | 0.25                                     | 0.5                                     | EPA 8260B              |
| 22    | Chlorobenzene (mono chlorobenzene) | 108907     | Taste & Odor   | 50                                       | 2                                       | EPA 8260B              |
| 24    | Chloroethane                       | 75003      | Taste & Odor   | 16                                       | 2                                       | EPA 8260B              |
| 25    | 2- Chloroethyl vinyl ether         | 110758     | Aquatic Toxicity                                       | 122 (2)                                  | 1                                       | EPA 8260B              |
| 26    | Chloroform                         | 67663      | OEHHA Cancer Risk                                      | 1.1                                      | 0.5                                     | EPA 8260B              |
| 35    | Chloromethane                      | 74873      | USEPA Health Advisory                                  | 3  | 2.0                                     | EPA 8260B              |
| 23    | Dibromochloromethane               | 124481     | Calif. Toxics Rule                                     | 0.41                                     | 0.5                                     | EPA 8260B              |
| 27    | Dichlorobromomethane               | 75274      | Calif. Toxics Rule                                     | 0.56                                     | 0.5                                     | EPA 8260B              |
| 36    | Dichloromethane                    | 75092      | Calif. Toxics Rule                                     | 4.7                                      | 2                                       | EPA 8260B              |
| 33    | Ethylbenzene                       | 100414     | Taste & Odor   | 29                                       | 2                                       | EPA 8260B              |
| 88    | Hexachlorobenzene                  | 118741     | Calif. Toxics Rule                                     | 0.00075                                  | 1                                       | EPA 8260B              |
| 89    | Hexachlorobutadiene                | 87683      | National Toxics Rule                                   | 0.44                                     | 1                                       | EPA 8260B              |
| 91    | Hexachloroethane                   | 67721      | National Toxics Rule                                   | 1.9                                      | 1                                       | EPA 8260B              |
| 94    | Naphthalene                        | 91203      | USEPA IRIS   | 14                                       | 10                                      | EPA 8260B              |
| 38    | Tetrachloroethene                  | 127184     | National Toxics Rule                                   | 0.8                                      | 0.5                                     | EPA 8260B              |
| 39    | Toluene                            | 108883     | Taste & Odor   | 42                                       | 2                                       | EPA 8260B              |
| 40    | trans-1,2-Dichloroethylene         | 156605     | Primary MCL  | 10                                       | 1                                       | EPA 8260B              |
| 43    | Trichloroethene                    | 79016      | National Toxics Rule                                   | 2.7                                      | 2                                       | EPA 8260B              |
| 44    | Vinyl chloride                     | 75014      | Primary MCL  | 0.5                                      | 0.5                                     | EPA 8260B              |

| SEMI-VOLATILE ORGANICS |  |  |
|------------------------|--|--|
|------------------------|--|--|

|    |                       |        |                      |        |   |           |
|----|-----------------------|--------|----------------------|--------|---|-----------|
| 60 | 1,2-Benzanthracene    | 56553  | Calif. Toxics Rule   | 0.0044 | 5 | EPA 8270C |
| 85 | 1,2-Diphenylhydrazine | 122667 | National Toxics Rule | 0.04   | 1 | EPA 8270C |

|       |                                  |            | Controlling Water Quality Criterion for Surface Waters |   |   |                        |
|-------|----------------------------------|------------|--|---|---|------------------------|
| CTR # | Constituent                      | CAS Number | Basis  | Criterion Concentration(1 (ug/L or noted) | Minimum Reporting Level (ug/L or noted) | Suggested Test Methods |
| 45    | 2-Chlorophenol                   | 95578      | Taste and Odor   | 0.1                                       | 2                                       | EPA 8270C              |
| 46    | 2,4-Dichlorophenol               | 120832     | Taste and Odor   | 0.3                                       | 1                                       | EPA 8270C              |
| 47    | 2,4-Dimethylphenol               | 105679     | Calif. Toxics Rule                                     | 540                                       | 2                                       | EPA 8270C              |
| 49    | 2,4-Dinitrophenol                | 51285      | National Toxics Rule                                   | 70  | 5                                       | EPA 8270C              |
| 82    | 2,4-Dinitrotoluene               | 121142     | National Toxics Rule                                   | 0.11                                      | 5                                       | EPA 8270C              |
| 55    | 2,4,6-Trichlorophenol            | 88062      | Taste and Odor   | 2   | 10                                      | EPA 8270C              |
| 83    | 2,6-Dinitrotoluene               | 606202     | USEPA IRIS   | 0.05                                      | 5                                       | EPA 8270C              |
| 50    | 2-Nitrophenol                    | 25154557   | Aquatic Toxicity                                       | 150 (3)                                   | 10                                      | EPA 8270C              |
| 71    | 2-Chloronaphthalene              | 91587      | Aquatic Toxicity                                       | 1600 (4)                                  | 10                                      | EPA 8270C              |
| 78    | 3,3'-Dichlorobenzidine           | 91941      | National Toxics Rule                                   | 0.04                                      | 5                                       | EPA 8270C              |
| 62    | 3,4-Benzofluoranthene            | 205992     | Calif. Toxics Rule                                     | 0.0044                                    | 10                                      | EPA 8270C              |
| 52    | 4-Chloro-3-methylphenol          | 59507      | Aquatic Toxicity                                       | 30  | 5                                       | EPA 8270C              |
| 48    | 4,6-Dinitro-2-methylphenol       | 534521     | National Toxics Rule                                   | 13.4                                      | 10                                      | EPA 8270C              |
| 51    | 4-Nitrophenol                    | 100027     | USEPA Health Advisory                                  | 60  | 10                                      | EPA 8270C              |
| 69    | 4-Bromophenyl phenyl ether       | 101553     | Aquatic Toxicity                                       | 122                                       | 10                                      | EPA 8270C              |
| 72    | 4-Chlorophenyl phenyl ether      | 7005723    | Aquatic Toxicity                                       | 122 (2)                                   | 5                                       | EPA 8270C              |
| 56    | Acenaphthene                     | 83329      | Taste and Odor   | 20  | 1                                       | EPA 8270C              |
| 57    | Acenaphthylene                   | 208968     | No Criteria Available                                  |   | 10                                      | EPA 8270C              |
| 58    | Anthracene                       | 120127     | Calif. Toxics Rule                                     | 9,600                                     | 10                                      | EPA 8270C              |
| 59    | Benzdine                         | 92875      | National Toxics Rule                                   | 0.00012                                   | 5                                       | EPA 8270C              |
| 61    | Benzo(a)pyrene (3,4-Benzopyrene) | 50328      | Calif. Toxics Rule                                     | 0.0044                                    | 2                                       | EPA 8270C              |
| 63    | Benzo(g,h,i)perylene             | 191242     | No Criteria Available                                  |   | 5                                       | EPA 8270C              |
| 64    | Benzo(k)fluoranthene             | 207089     | Calif. Toxics Rule                                     | 0.0044                                    | 2                                       | EPA 8270C              |
| 65    | Bis(2-chloroethoxy) methane      | 111911     | No Criteria Available                                  |   | 5                                       | EPA 8270C              |
| 66    | Bis(2-chloroethyl) ether         | 111444     | National Toxics Rule                                   | 0.031                                     | 1                                       | EPA 8270C              |
| 67    | Bis(2-chloroisopropyl) ether     | 39638329   | Aquatic Toxicity                                       | 122 (2)                                   | 10                                      | EPA 8270C              |
| 68    | Bis(2-ethylhexyl) phthalate      | 117817     | National Toxics Rule                                   | 1.8                                       | 5                                       | EPA 8270C              |
| 70    | Butyl benzyl phthalate           | 85687      | Aquatic Toxicity                                       | 3 (5)                                     | 10                                      | EPA 8270C              |
| 73    | Chrysene                         | 218019     | Calif. Toxics Rule                                     | 0.0044                                    | 5                                       | EPA 8270C              |
| 81    | Di-n-butylphthalate              | 84742      | Aquatic Toxicity                                       | 3 (5)                                     | 10                                      | EPA 8270C              |
| 84    | Di-n-octylphthalate              | 117840     | Aquatic Toxicity                                       | 3 (5)                                     | 10                                      | EPA 8270C              |

|       |                           |            | Controlling Water Quality Criterion for Surface Waters |   |   |                        |
|-------|---------------------------|------------|--|---|---|------------------------|
| CTR # | Constituent               | CAS Number | Basis  | Criterion Concentration(1 (ug/L or noted) | Minimum Reporting Level (ug/L or noted) | Suggested Test Methods |
| 74    | Dibenzo(a,h)-anthracene   | 53703      | Calif. Toxics Rule                                     | 0.0044                                    | 0.1                                     | EPA 8270C              |
| 79    | Diethyl phthalate         | 84662      | Aquatic Toxicity                                       | 3 (5)                                     | 2                                       | EPA 8270C              |
| 80    | Dimethyl phthalate        | 131113     | Aquatic Toxicity                                       | 3 (5)                                     | 2                                       | EPA 8270C              |
| 86    | Fluoranthene              | 206440     | Calif. Toxics Rule                                     | 300                                       | 10                                      | EPA 8270C              |
| 87    | Fluorene                  | 86737      | Calif. Toxics Rule                                     | 1300                                      | 10                                      | EPA 8270C              |
| 90    | Hexachlorocyclopentadiene | 77474      | Taste and Odor   | 1   | 5                                       | EPA 8270C              |
| 92    | Indeno(1,2,3-c,d)pyrene   | 193395     | Calif. Toxics Rule                                     | 0.0044                                    | 0.05                                    | EPA 8270C              |
| 93    | Isophorone                | 78591      | National Toxics Rule                                   | 8.4                                       | 1                                       | EPA 8270C              |
| 98    | N-Nitrosodiphenylamine    | 86306      | National Toxics Rule                                   | 5   | 1                                       | EPA 8270C              |
| 96    | N-Nitrosodimethylamine    | 62759      | National Toxics Rule                                   | 0.00069                                   | 5                                       | EPA 8270C              |
| 97    | N-Nitrosodi-n-propylamine | 621647     | Calif. Toxics Rule                                     | 0.005                                     | 5                                       | EPA 8270C              |
| 95    | Nitrobenzene              | 98953      | National Toxics Rule                                   | 17  | 10                                      | EPA 8270C              |
| 53    | Pentachlorophenol         | 87865      | Calif. Toxics Rule                                     | 0.28                                      | 1                                       | EPA 8270C              |
| 99    | Phenanthrene              | 85018      | No Criteria Available                                  |   | 5                                       | EPA 8270C              |
| 54    | Phenol                    | 108952     | Taste and Odor   | 5   | 1                                       | EPA 8270C              |
| 100   | Pyrene                    | 129000     | Calif. Toxics Rule                                     | 960                                       | 10                                      | EPA 8270C              |

| PESTICIDES - PCBs |                                   |          |                       |           |       |           |
|-------------------|-----------------------------------|----------|-----------------------|-----------|-------|-----------|
| 110               | 4,4'-DDD                          | 72548    | Calif. Toxics Rule    | 0.00083   | 0.05  | EPA 8081A |
| 109               | 4,4'-DDE                          | 72559    | Calif. Toxics Rule    | 0.00059   | 0.05  | EPA 8081A |
| 108               | 4,4'-DDT                          | 50293    | Calif. Toxics Rule    | 0.00059   | 0.01  | EPA 8081A |
| 112               | alpha-Endosulfan                  | 959988   | National Toxics Rule  | 0.056 (7) | 0.02  | EPA 8081A |
| 103               | alpha-Hexachlorocyclohexane (BHC) | 319846   | Calif. Toxics Rule    | 0.0039    | 0.01  | EPA 8081A |
| 102               | Aldrin                            | 309002   | Calif. Toxics Rule    | 0.00013   | 0.005 | EPA 8081A |
| 113               | beta-Endosulfan                   | 33213659 | Calif. Toxics Rule    | 0.056 (7) | 0.01  | EPA 8081A |
| 104               | beta-Hexachlorocyclohexane        | 319857   | Calif. Toxics Rule    | 0.014     | 0.005 | EPA 8081A |
| 107               | Chlordane                         | 57749    | Calif. Toxics Rule    | 0.00057   | 0.1   | EPA 8081A |
| 106               | delta-Hexachlorocyclohexane       | 319868   | No Criteria Available |           | 0.005 | EPA 8081A |
| 111               | Dieldrin                          | 60571    | Calif. Toxics Rule    | 0.00014   | 0.01  | EPA 8081A |
| 114               | Endosulfan sulfate                | 1031078  | Ambient Water Quality | 0.056     | 0.05  | EPA 8081A |
| 115               | Endrin                            | 72208    | Calif. Toxics Rule    | 0.036     | 0.01  | EPA 8081A |

|       |                                       |            | Controlling Water Quality Criterion for Surface Waters |   |   |                        |
|-------|---------------------------------------|------------|--|---|---|------------------------|
| CTR # | Constituent                           | CAS Number | Basis  | Criterion Concentration(1 (ug/L or noted) | Minimum Reporting Level (ug/L or noted) | Suggested Test Methods |
| 116   | Endrin Aldehyde                       | 7421934    | Calif. Toxics Rule                                     | 0.76                                      | 0.01                                    | EPA 8081A              |
| 117   | Heptachlor                            | 76448      | Calif. Toxics Rule                                     | 0.00021                                   | 0.01                                    | EPA 8081A              |
| 118   | Heptachlor Epoxide                    | 1024573    | Calif. Toxics Rule                                     | 0.0001                                    | 0.01                                    | EPA 8081A              |
| 105   | Lindane (gamma-Hexachlorocyclohexane) | 58899      | Calif. Toxics Rule                                     | 0.019                                     | 0.02                                    | EPA 8081A              |
| 119   | PCB-1016                              | 12674112   | Calif. Toxics Rule                                     | 0.00017 (8)                               | 0.5                                     | EPA 8082               |
| 120   | PCB-1221                              | 11104282   | Calif. Toxics Rule                                     | 0.00017 (8)                               | 0.5                                     | EPA 8082               |
| 121   | PCB-1232                              | 11141165   | Calif. Toxics Rule                                     | 0.00017 (8)                               | 0.5                                     | EPA 8082               |
| 122   | PCB-1242                              | 53469219   | Calif. Toxics Rule                                     | 0.00017 (8)                               | 0.5                                     | EPA 8082               |
| 123   | PCB-1248                              | 12672296   | Calif. Toxics Rule                                     | 0.00017 (8)                               | 0.5                                     | EPA 8082               |
| 124   | PCB-1254                              | 11097691   | Calif. Toxics Rule                                     | 0.00017 (8)                               | 0.5                                     | EPA 8082               |
| 125   | PCB-1260                              | 11096825   | Calif. Toxics Rule                                     | 0.00017 (8)                               | 0.5                                     | EPA 8082               |
| 126   | Toxaphene                             | 8001352    | Calif. Toxics Rule                                     | 0.0002                                    | 0.5                                     | EPA 8081A              |
| 16    | 2,3,7,8-TCDD (Dioxin)                 | 1746016    | Calif. Toxics Rule                                     | 1.30E-08                                  | 5.00E-06                                | EPA 8290 (HRGC) MS     |

FOOTNOTES:

- (1) - The Criterion Concentrations serve only as a point of reference for the selection of the appropriate analytical method. They do not indicate a regulatory decision that the cited concentration is either necessary or sufficient for full protection of beneficial uses. Available technology may require that effluent limits be set lower than these values.
- (2) - For haloethers
- (3) - For nitrophenols.
- (4) - For chlorinated naphthalenes.
- (5) - For phthalate esters.
- (6) - Freshwater aquatic life criteria for metals are expressed as a function of total hardness (mg/L) in the water body. Values displayed correspond to a total hardness of 40 mg/L.
- (7) - Criteria for sum of alpha- and beta- forms.
- (8) - Criteria for sum of all PCBs.

### **Attachment 3 -Dioxin and Furan CTR Sampling**

Section 3 of the State Implementation Plan requires that each NPDES discharger conduct sampling and analysis of dioxin and dibenzofuran congeners. In the case of limited threat discharges, the minimum required number and frequency of sampling is once for the discharge and once for the receiving water. Additional sampling may be required at the discretion of the Regional Board.

Each sample shall be analyzed for the seventeen congeners listed in the table below. High Resolution GCMS Method 8290, or another method capable of individually quantifying the congeners to an equivalent detection level, shall be used for the analyses.

Sample results shall be submitted along with routine monitoring reports as soon as the laboratory results are available.

For each sample the discharger shall report:

- o The measured or estimated concentration of each of the seventeen congeners
- o The quantifiable limit of the test (as determined by procedures in Section 2.4.3, No. 5 of the SIP)
- o The Method Detection Level (MDL) for the test

| Congener               | TEF    |
|------------------------|--------|
| 2,3,7,8TetraCDD        | 1      |
| 1,2,3,7,8-PentaCDD     | 1.0    |
| 1,2,3,4,7,8-HexaCDD    | 0.1    |
| 1,2,3,6,7,8-HexaCDD    | 0.1    |
| 1,2,3,7,8,9-HexaCDD    | 0.1    |
| 1,2,3,4,6,7,8-HeptaCDD | 0.01   |
| OctaCDD                | 0.0001 |
| 2,3,7,8-TetraCDF       | 0.1    |
| 1,2,3,7,8-PentaCDF     | 0.05   |
| 2,3,4,7,8-PentaCDF     | 0.5    |
| 1,2,3,4,7,8-HexaCDF    | 0.1    |
| 1,2,3,6,7,8-HexaCDF    | 0.1    |
| 1,2,3,7,8,9-HexaCDF    | 0.1    |
| 2,3,4,6,7,8-HexaCDF    | 0.1    |
| 1,2,3,4,6,7,8-HeptaCDF | 0.01   |
| 1,2,3,4,7,8,9-HeptaCDF | 0.01   |
| OctaCDF                | 0.0001 |

## Attachment 4 - Reporting Requirements for CTR Monitoring

1. **Laboratory Requirements.** The laboratory analyzing the monitoring samples shall be certified by the Department of Health Services in accordance with the provisions of Water Code Section 13176 and must include quality assurance/quality control data with their reports.
2. **Criterion Quantitation Limit (CQL).** The criterion quantitation limits will be equal to or lower than the minimum levels (MLs) in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Copies of the SIP may be obtained from the State Water Resources Control Board, or downloaded from <http://www.swrcb.ca.gov/iswp/final.pdf>) or the detection limits for purposes of reporting (DLRs) published by the Department of Health Services (<http://www.dhs.ca.gov/ps/ddwem/chemicals/DLR/dlindex.htm>) which is below the controlling water quality criterion concentrations summarized in attachment II of this letter.
3. **Method Detection Limit (MDL).** The method detection limit for the laboratory shall be determined by the procedure found in 40 Code of Federal Regulations (CFR) Part 136, Appendix B (revised as of May 14, 1999).
4. **Reporting Limit (RL).** The reporting limit for the laboratory. This is the lowest quantifiable concentration that the laboratory can determine. Ideally, the RL should be equal to or lower than the CQL to meet the purposes of this monitoring.
5. **Reporting Protocols.** The results of analytical determinations for the presence of chemical constituents in a sample shall use the following reporting protocols:
  - a. Sample results greater than or equal to the reported RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
  - b. Sample results less than the report RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
  - c. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory, if such information is available, may include numerical estimates of the data quantity for the reported result. Numerical estimates of data quality may be percent accuracy ( $\pm$  a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
  - d. Sample results that are less than the laboratory's MDL shall be reported as "Not Detected" or ND.

6. **Data Format**. The monitoring report shall contain the following information for each pollutant:
- a. The name of the constituent.
  - b. Sampling location.
  - c. The date the sample was collected.
  - d. The time the sample was collected.
  - e. The date the sample was analyzed. For organic analyses, the extraction date will also be indicated to assure that hold times are not exceeded for prepared samples.
  - f. The analytical method utilized.
  - g. The measured or estimated concentration.
  - h. The required Criterion Quantitation Limit (CQL).
  - i. The laboratory's current Method Detection Limit (MDL), as determined by the procedure found in 40 CFR Part 136, Appendix B (revised as of May 14, 1999).
  - j. The laboratory's lowest reporting limit (RL).
  - k. Any additional comments.



## 6. Example of Data Format.

Discharger: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Name of Laboratory: \_\_\_\_\_

Laboratory Contact: \_\_\_\_\_

Phone Number: \_\_\_\_\_

[illegible]

\*The effluent sampling station and the upstream receiving water station specified in the NPDES Permit Monitoring and Reporting Program should be used. Other sampling locations must be approved by Regional Board staff. Include longitude and latitude coordinates for the receiving water sampling stations.

ATTACHMENT D

LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD

**NOTICE OF INTENT**

TO COMPLY WITH THE TERMS OF GENERAL ORDER NO. R6T-2008-(**PROPOSED**)  
FOR  
LIMITED THREAT DISCHARGES TO SURFACE WATERS

This Notice of Intent, together with the Best Management Practices Plan, is equivalent to a Report of Waste Discharge.

I. **CONTRACTOR/OPERATOR** -If additional owners/operators are involved, provide the information in a supplementary letter.

|                  |  |      |        |
|------------------|--|------|--------|
| Name:            |  |      |        |
| Mailing Address: |  |      |        |
| City:            | State:   | Zip: | Phone: |
| Contact Person:  | Contractor_____ Operator_____ Contractor/Operator_____ |      |        |

II. **PROPERTY OWNER** -If additional owners/operators are involved, provide the information in a supplementary letter.

|                  |        |      |        |
|------------------|--------|------|--------|
| Name:            |        |      |        |
| Mailing Address: |        |      |        |
| City:            | State: | Zip: | Phone: |
| Contact Person:  |        |      |        |

III. **WATER SUPPLIERS (If applicable)**

|                  |        |      |        |
|------------------|--------|------|--------|
| Name:            |        |      |        |
| Mailing Address: |        |      |        |
| City:            | State: | Zip: | Phone: |
| Contact Person:  |        |      |        |

IV. **BILLING ADDRESS:**

|                  |        |      |        |
|------------------|--------|------|--------|
| Name:            |        |      |        |
| Mailing Address: |        |      |        |
| City:            | State: | Zip: | Phone: |
| Contact Person:  |        |      |        |

**V. DISCHARGE LOCATION**

-If more than one discharge is proposed, provide the information in a supplementary letter.

Street (including address, if any) \_\_\_\_\_

City/County \_\_\_\_\_

Nearest Cross Street(s) \_\_\_\_\_

Township/Range/Section T\_\_\_\_\_, R\_\_\_\_\_, Section\_\_\_\_\_, MDB&amp;M

Attach a map of at least 1:2400 (1" = 2000') showing the discharge site. (eg. USGS 7.5' topographical map.)

A map shall also be provided that shows the treatment system, discharge point and surface waters. Wells and residences within 1,500 feet of the discharge site shall also be identified.

**VI. DISCHARGE INFORMATION**

Please Identify type of discharge:

\_\_\_\_\_ Diverted stream flow

\_\_\_\_\_ Hydrostatic testing maintenance, repair, and  
disinfection of potable water supply pipelines, tanks,  
reservoirs, etc.

\_\_\_\_\_ Construction dewatering

\_\_\_\_\_ Water treatment plant backflushing, residuals, and  
wasting

\_\_\_\_\_ Dredge spoils dewatering

\_\_\_\_\_ Fire hydrant testing or flushing

\_\_\_\_\_ Subterranean seepage dewatering

\_\_\_\_\_ Hydrostatic testing of new pipelines, tanks, & reservoirs  
used for purposes other than potable water supply

\_\_\_\_\_ Well construction and pump testing of aquifer supplies

\_\_\_\_\_ Geothermal well testing

Start Date \_\_\_\_\_ Stop Date \_\_\_\_\_ (estimate) Discharge Rate \_\_\_\_\_ MGD.

Is the discharge short term, intermittent, or seasonal? \_\_\_\_\_

Please provide a time schedule below.

|  |
|--|
|  |
|  |
|  |
|  |
|  |

## VII. LAND DISPOSAL/RECLAMATION ANALYSIS

Board policies dictate that wastewater discharges must be contained on land or beneficially re-used if practical. You must evaluate and rule out this alternative prior to any discharge to surface water under this Order.

Have you fully considered land discharge options? Please list the constraints below that limit your ability to discharge to land.

| <u>Land Discharge Option</u>              | <u>Environmental Constraints</u> | <u>Financial Constraints</u> | <u>Area or Access Constraints</u> |
|---|----------------------------------|------------------------------|-----------------------------------|
| Percolation trenches or basins            | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
| Irrigation of landscaping                 | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
| Spray disposal                            | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
| Evaporation trenches or basins            | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
| Subsurface infiltration                   | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
|   | _____                            | _____                        | _____                             |
| Other similar disposal methods considered | _____                            | _____                        | _____                             |
| Describe below:                           | _____                            | _____                        | _____                             |
| _____                                     | _____                            | _____                        | _____                             |

Is land reclamation feasible? Yes \_\_\_\_\_ No \_\_\_\_\_

If no, explain below. If yes, you should contact the Regional Board. This Order does not apply if there is no discharge to surface waters.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**VIII. TREATMENT SYSTEM**

Please Identify:

\_\_\_\_\_ None (describe why a treatment system is not necessary)

\_\_\_\_\_ Pond

\_\_\_\_\_ Other (please describe)

Provide a schematic drawing of the proposed treatment system and process, and describe pollutant removal mechanisms, and estimated effluent concentrations. Provide a residual waste disposal plan if residuals will occur.

**IX. RECEIVING WATER INFORMATION**

A. Name of closest receiving water:

B. Receiving water is tributary to (name major downstream water body):

C. Quality of receiving water (analyze for all constituents pertaining to the category of discharge listed in Finding No. 10 of the permit and as specified in the Monitoring and Reporting Program):

D. Estimated flow of stream or estimated volume of lake or pond:

**X. PRIMARY POLLUTANTS/PARAMETERS LIKELY TO BE IN THE DISCHARGE**

Please identify constituents of concern:

\_\_\_\_\_ Settleable material

\_\_\_\_\_ Color

\_\_\_\_\_ Suspended material

\_\_\_\_\_ Turbidity

\_\_\_\_\_ PH

\_\_\_\_\_ Other (please describe)

\_\_\_\_\_ Chlorine

\_\_\_\_\_ Construction material pollutants

\_\_\_\_\_ Total dissolved solids

\_\_\_\_\_ Metals

\_\_\_\_\_ Trace organic compounds

Have samples been collected? \_\_\_\_\_ Yes (attach results) \_\_\_\_\_ No

Are additives in the discharge? \_\_\_\_\_ Yes (describe and quantify) \_\_\_\_\_ No

If yes, please specify the additive and/or sample results \_\_\_\_\_

**XI. ABILITY TO COMPLY**

Do you believe the discharge may have acute or chronic toxicity, chemical or organic constituents, bacteria, pesticides, oil and grease, radioactivity, salinity or temperature that may violate receiving water objectives of this permit or adversely impact beneficial uses of the receiving water? \_\_\_\_\_ Yes \_\_\_\_\_ No

If your answer is no, please provide an explanation of ability to comply considering the receiving water quality, discharge water quality, and the pollutant loading to the receiving water.

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If your answer is yes, you must contact a Professional Engineer. A specific individual permit may be required from the Regional board rather than this General Order.

**XII. PROFESSIONAL ENGINEER**

If a Professional Engineer has helped you evaluate the proposed discharge for compliance with this General Order, please identify

Name:

Mailing Address:

City:

State:

Zip:

Phone:

Signature

Certificate No.

Date:

**XIII. QUALIFIED BIOLOGIST**

If a categorical exception from interim monitoring requirements will be utilized for CTR compliance, please identify the qualified biologist that will evaluate the status of beneficial uses upon project completion. A post-project certification that receiving water beneficial uses have not been impaired is required.

Name:

Mailing Address:

City:

State:

Zip:

Phone:

Signature

Date:

**XIV. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

Name of Lead Agency: \_\_\_\_\_

Has a public agency determined that the proposed project is exempt from CEQA? ☐ Yes ☐ No

If Yes, state the basis for the exemption and the name of the agency supplying the exemption on the line below.

Basis for Exemption/Agency: \_\_\_\_\_

Has a "Notice of Determination" been filed under CEQA? ☐ Yes ☐ No

If Yes, enclose a copy of the CEQA document and expected date of completion.

**Expected CEQA Documents:**☐ EIR ☐ Negative Declaration

Expected CEQA Completion Date: \_\_\_\_\_

**XV. BEST MANAGEMENT PRACTICES PLAN**Is the Best Management Practices Plan attached? ☐ Yes ☐ No**XVI. FEES**

A check payable to the State Water Resources Control Board in the amount of \$1000.00 (or appropriate current fee) must be submitted.

**CERTIFICATION**

I hereby certify under penalty of perjury that the information provided in this application and in any attachments is true and accurate to the best of my knowledge. By signing this NOI, I agree to comply with the monitoring and reporting program and stop the discharge if there is any violation, or threatened violation, of the General Permit.

Signature of Contractor/Operator:

Signature of Property Owner:

Print or Type Name:

Print or Type Name:

Title:

Date:

Title:

Date:

## ATTACHMENT E

### BEST MANAGEMENT PRACTICES PLAN

The purpose of the Best Management Practices (BMP) plan is to evaluate potential sources of sediment and other pollutants at the project site and put controls in place that will effectively prevent pollutant discharges to surface and ground waters. The following general pollution control requirements should be addressed in the BMP Plan, as applicable:

1. control limited threat discharges to minimize impacts to water quality;
2. prevent the discharge of pollutants associated with construction activities to surface waters;
3. retain soil and sediment on site;
4. permanently stabilize disturbed soils.

Specific guidance for completing the Best Management Practices (BMP) Plan is provided below. The BMP Plan must be submitted with the Notice of Intent (NOI) to obtain coverage under the General Permit. Use the attached form for preparing the BMP plan.

#### Limited Threat Discharge Control

This section of the BMP Plan addresses the measures taken to minimize or eliminate the impacts of the discharge to water quality and the environment. Options may include, but are not limited to, dechlorination of potable water, filtering or settling of solids and other pollutants, diverting flows around disturbed areas using stabilized conveyance systems, and energy dissipation of water flow to slow water velocity in conveyance systems and prevent erosion and flooding.

**Indicate in the BMP Plan what methods will be used to treat the discharge and prevent pollutants from impacting water quality and the environment. Options may include, but are not limited to:**

- **Dechlorination of potable water**
- **Ponds, trenches or basins for settling solids, or cooling**
- **Vegetated filter strips or swales**
- **Physical filter for solids, dissolved solids or total petroleum hydrocarbons (e.g., dirt bag, filter canister, activated carbon filter, sand filter)**
- **Stabilized conveyance systems**
- **Energy dissipation (structures designed to prevent erosion and slow water velocity associated with conveyance systems)**
- **Diverting flows around disturbed areas or other pollutant sources using stabilized conveyances**
- **Flow controls to prevent erosion and flooding**



## Sediment Control at Construction Sites

Where soils will be disturbed by clearing, grading, excavation or other processes sediment control BMPs are required at appropriate locations along the construction site perimeter and at all locations that discharge to surface waters, including internal inlets to the storm drain system. Effective filtration devices, barriers, and settling devices shall be selected, installed and maintained properly. The sediment control plan must also include provisions to temporarily stabilize construction access points such that soil, sediment, and other construction related materials are not tracked beyond the site perimeter by equipment or vehicles.

**Indicate in the BMP Plan sediment controls that will be used at the site. Options may include, but are not limited to:**

### **Filter barriers -**

- fiber rolls/logs
- silt fence
- straw bale barriers
- gravel inlet filters

### **Retention structures -**

- sediment traps
- settling basins

### **Stabilized access points/good housekeeping -**

- crushed rock
- mulch
- landing mats
- frequent sweeping

## Stabilization and Erosion Prevention

All disturbed areas of the construction site must be stabilized from erosion once construction is complete.

**Indicate in the BMP Plan what stabilization measures will be used at the site. Options may include, but are not limited to:**

- Seeding and/or planting (including hydro mulching/seeding)
- Mulching (wood chips, gravel, other) in combination with seeding/planting
- Installing erosion blankets (typically used on steeper disturbed slopes or unlined drainage ditches in combination with permanent seeding/planting)
- Placing rip rap
- Other

## Spill Prevention and Control

The BMP Plan must describe measures to prevent and control potential leaks/spills of petroleum products such as fuels and lubricating materials, and other potentially hazardous materials. Secured storage areas for fuels and chemicals should be established and sufficient spill cleanup materials should be at the site to respond to accidental spills.

**Indicate in the BMP Plan what spill prevention and control measures will be used. Options include, but are not limited to:**

- **Covered material storage**
- **Material storage containment (berms, lined surfaces, secondary containment devices etc.)**
- **Regular equipment leak inspections**
- **Drip pans**
- **Absorbents**

## Maintenance, Inspection, and Repair

BMPs implemented at the site must be properly maintained to be effective. The BMP plan shall include provisions to inspect and maintain all BMPs identified in the plan throughout the duration of the project. Sites that are inactive during inclement or winter weather should be checked periodically to ensure the controls continue to be effective. For sites where construction activity is conducted through the wet season, the Discharger must ensure that BMPs remain effective at all times.

**Indicate in the BMP Plan how BMPs will be inspected and repaired in accordance with the following minimum program:**

- **Cease construction through wet season and winterize to prevent erosion and pollutant discharges**
- **Inspect BMPs before and after storm events**
- **Inspect BMPs once each 24-hour period during extended storm events**
- **Implement repairs or design changes as soon as feasible depending upon worker safety and field conditions**
- **Have provisions to respond to failures and emergencies**

## References

For detailed information on developing BMPs, the EPA document *“Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices”* (EPA 832-R-92-005) is a useful resource. This document may be purchased as item PB 922 359 51 from the National Technical Information Service (703-605-6000 or <http://www.ntis.gov/>) or

may be downloaded as separate chapters from the following website location:

[http://cfpub.epa.gov/npdes/pkeyword.cfm?keywords=EPA+832-R-92-005&program\\_id=0](http://cfpub.epa.gov/npdes/pkeyword.cfm?keywords=EPA+832-R-92-005&program_id=0)

A good source for overall BMP design criteria and modifications for cold climates "*Stormwater BMP Design Supplement for Cold Climates*" by Caraco and Claytor can be downloaded from the following website:

<http://www.cwp.org/cold-climates.htm>

For detailed information on dechlorination of potable water and measurement of total residual chlorine, the document "*Guidance Manual for the Disposal of Chlorinated Water*" by Tikkanen, et al. is a useful resource and can be downloaded from the following website location:

<http://vita-d-chlor.com/specs/AWWARFDechlorGuides.pdf>

Additional information may be also be obtained by contacting the Lahontan Regional Water Quality Control Board.

## BEST MANAGEMENT PRACTICES PLAN

Discharger Name: \_\_\_\_\_

Site Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_

County: \_\_\_\_\_

Use the template provided below to identify BMPs to be implemented at the project site. Check the boxes next to the BMPs that will be used. If other BMPs will be used, describe them in the space provided for "Other BMP." Attach additional sheets if needed.

### LIMITED THREAT DISCHARGE TREATMENT AND CONTROL

Limited threat discharges will be treated and controlled by the following method(s):

- ☐ **Dechlorination of potable water**
- ☐ **Ponds, trenches or basins**
- ☐ **Vegetated filter strips and swales**
- ☐ **Physical filter for solids, dissolved solids or total petroleum hydrocarbons (e.g., dirt bag, filter canister, activated carbon filter, sand filters)**
- ☐ **Stabilized conveyance systems**
- ☐ **Energy dissipation / flow diversion / flow controls**
- ☐ **Other (describe below)**

## BEST MANAGEMENT PRACTICES PLAN

### SEDIMENT CONTROL AT CONSTRUCTION SITES

Sediment will be prevented from running off the site or to storm drain inlets by the following method(s):

**Filter barriers -**

- ☐ fiber rolls
- ☐ silt fence
- ☐ straw bale barriers
- ☐ gravel inlet filters

**Retention structures -**

- ☐ sediment traps
- ☐ settling basins

**Stabilized access points/good housekeeping -**

- ☐ crushed rock
- ☐ mulch
- ☐ landing mats
- ☐ frequent sweeping

☐ **Other (describe below)**

## BEST MANAGEMENT PRACTICES PLAN

### STABILIZATION TO PREVENT EROSION

Disturbed soil areas not covered with impervious surfaces will be permanently stabilized at the completion of the project by the following method(s):

- ☐ Seeding and/or planting (including hydro mulching/seeding)
- ☐ Mulching (wood chips, gravel, other) in combination with seeding/planting
- ☐ Installing erosion blankets (typically used on steeper disturbed slopes or unlined drainage ditches in combination with permanent seeding/planting)
- ☐ Placing rip rap (describe location)
- ☐ Other (describe below)

### SPILL PREVENTION AND CONTROL

The following BMPs will be implemented to prevent and control potential leaks/spills of petroleum products such as fuels and lubricating materials, and other potentially hazardous materials, as appropriate:

- ☐ Material storage containment (covered storage, berms, lined surfaces, secondary containment devices, etc.)
- ☐ Regular equipment leak inspections
- ☐ Drip Pans
- ☐ Absorbents
- ☐ Other (describe below)

## BEST MANAGEMENT PRACTICES PLAN

### MAINTENANCE, INSPECTION, AND REPAIR

BMPs will be inspected and repaired in accordance with the following minimum program:

**For inactive construction sites during wet season (October 15 - May 1)**

- ☐ **Cease construction through wet season and winterize to control pollutants**

**For active construction sites during wet season (October 15 - May 1)**

- ☐ **Inspect BMPs, and repair if needed, before and after storm events**
- ☐ **Inspect BMPs once each 24-hour period during extended storm events**
- ☐ **Implement repairs or design changes as soon as feasible depending upon worker safety and field conditions**
- ☐ **Have provisions to respond to failures and emergencies (describe below)**
- ☐ **Other (describe below)**



# California Regional Water Quality Control Board Lahontan Region



**Linda S. Adams**  
Secretary for Environmental  
Protection

2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150  
(530) 542-5400 • Fax (530) 544-2271  
<http://www.waterboards.ca.gov/lahontan>

**Arnold Schwarzenegger**  
Governor

## **ATTACHMENT F**

### **BOARD ORDER TRANSFER REQUEST FORM**

Board Order No. \_\_\_\_\_ Facility Location: \_\_\_\_\_  
WDID No. \_\_\_\_\_ (Street Address)

\_\_\_\_\_  
(City, County, ZIP) (Assessor's Parcel Nos.)

I request the transfer of the existing waste discharge requirements on \_\_\_\_\_  
(effective date), contained in the above-referenced Board Order in accordance with the  
following:

#### **TRANSFER FROM:**

\_\_\_\_\_  
(Former facility name)

\_\_\_\_\_  
(Former property owner) (Former operator)

#### **TRANSFER TO:**

\_\_\_\_\_  
(New facility name)

\_\_\_\_\_  
(New property owner) (New Operator)

I understand that I am responsible for compliance with the Board Order and will be billed an  
annual fee for the waste discharge from this facility. I certify that: 1) I have reviewed the Report  
of Waste Discharge and the Board Order; 2) the facility construction and discharges from the  
site have not substantially changed; and 3) I will notify the Board of any material change in this  
facility, any change in the amount, type or manner of waste discharge or any future change in  
the facility owner or operator.

\_\_\_\_\_  
Signature (New owner/operator) (Date)

\_\_\_\_\_  
(Company name, if appropriate) (Telephone number)

\_\_\_\_\_  
(Mailing address)

#### **(FOR REGIONAL BOARD USE ONLY)**

Transfer recommended \_\_\_\_\_ Date \_\_\_\_\_ Transfer recorded \_\_\_\_\_ Date \_\_\_\_\_

Transfer approved \_\_\_\_\_, Executive Officer Date \_\_\_\_\_

***California Environmental Protection Agency***



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

2501 Lake Tahoe Boulevard, South Lake Tahoe, CA 96150  
(530) 542-5400 • Fax (530) 544-2271  
<http://www.waterboards.ca.gov/lahontan>

**ORDER NO. R6T-2011-0019  
NPDES NO. CAG616002**

**GENERAL WASTE DISCHARGE REQUIREMENTS  
AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY IN  
THE LAKE TAHOE HYDROLOGIC UNIT, COUNTIES OF  
ALPINE, EL DORADO, AND PLACER**

The following Dischargers are subject to waste discharge requirements as set forth in this Order (as authorized by the Notice of Applicability):

**Table 1. Discharger Information**

|                    |  |
|--------------------|--|
| <b>Dischargers</b> | Individuals, public agencies, private businesses, and other legal entities performing construction activities that results in land surface disturbances of greater than one acre, or less than one acre if the construction activity is part of a larger common plan of development in the Lake Tahoe Hydrologic Unit, or as otherwise defined in section II.D of this General Permit. |
|--------------------|--|

**Table 2. Administrative Information**

|  |                       |
|--|-----------------------|
| This Order was adopted by the Regional Water Quality Control Board on: | <u>April 14, 2011</u> |
| This Order shall become effective on:                                  | <u>April 14, 2011</u> |
| This NPDES Permit shall expire on:                                     | <u>April 13, 2016</u> |

I, Harold J. Singer, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on April 14, 2011.

  
\_\_\_\_\_  
HAROLD J. SINGER, EXECUTIVE OFFICER

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## **LIST OF ATTACHMENTS**

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| <b>Attachment A -</b>   | <b>List of Acronyms</b>  |
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| <b>Attachment H –</b>   | <b>Rain Event Action Plan Template</b>                             |
| <b>Attachment I -</b>   | <b>SWPPP Template</b>  |

**Fact Sheet**

## **I. FINDINGS**

The California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) finds:

**A. Background.** In 1972, the Clean Water Act (CWA) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On November 16, 1990, the United States Environmental Protection Agency (USEPA) published final regulations that established storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999 lowered the permitting threshold from five acres to one acre.

While federal regulations allow two permitting options for storm water discharges (Individual Permits and General Permits), the Lahontan Water Board has elected to adopt this General Permit at this time that will apply to most storm water discharges associated with construction activity in the Lake Tahoe Hydrologic Unit.

On March 10, 2005, the Lahontan Water Board reissued the *General Permit for Discharges of Storm Water Runoff Associated with Construction Activity Involving Land Disturbance in the Lake Tahoe Hydrologic Unit* (Board Order No. R6T-2005-0007). That NPDES Permit must be reissued. Dischargers of storm water runoff in the Lake Tahoe Hydrologic Unit to surface waters must obtain authorization under this reissued General Permit for construction-related discharge to waters of the United States. To obtain authorization for continued and new-project discharges to waters of the United States, Dischargers must submit a complete application, as described in section II of this General Permit.

Regulating many storm water discharges under one permit will greatly reduce the administrative burden associated with permitting individual storm water discharges.

**B. Discharge Description.** This General Permit regulates discharges of pollutants in storm water associated with construction activity (storm water discharges) to waters of the United States within the Lake Tahoe Hydrologic Unit from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface. Construction activity includes demolition that disturbs the land, clearing, grading, excavation, and other land disturbance activities. Waters as used in this General Permit are defined in section 122.2(a) of Title 40 of the Code of Federal Regulations (CFR), and include, but are not limited to, wetlands rivers and streams, either perennial or ephemeral, which flow in natural or artificial watercourses, lakes and

impoundments of waters otherwise defined as Waters of the US within the State of California. Discharges of non-storm water to land may be necessary for the completion of certain construction projects. Such discharges include, but are not limited to, irrigating vegetation for erosion control measures, flushing and testing pipes, dewatering construction excavations, flushing fire hydrants, and watering to control dust. These and other non-storm water discharges are also conditionally covered under this General Permit, provided the discharge is not prohibited and/or is granted a prohibition exemption.

**C. Legal Authorities.** This Order is issued pursuant to section 402 of the CWA and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges of storm water from construction sites equal to or in excess of one acre to surface waters. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

Section 122.28 of Title 40 of the *Code of Federal Regulations* (40 CFR 122.28) authorizes USEPA and approved states to issue general permits to regulate a point source category if the sources:

1. Involve the same or substantially similar types of operations;
2. Discharge the same type of waste;
3. Require the same type of effluent limitations or operating conditions;
4. Require similar monitoring; and
5. Are more appropriately regulated under a general permit rather than individual permits.

On September 22, 1989, USEPA granted the State of California, through the State Water Resources Control Board (State Water Board) and the nine regional Water Boards, the authority to issue general NPDES permits pursuant to 40 CFR Parts 122 and 123. This General Permit meets the criteria of 1 through 5 listed above.

**D. Background and Rationale for Requirements.** The Lahontan Water Board developed the requirements in this General Permit based on readily available information for several similar discharges, the State-wide General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ) and the requirements contained in Order No. R6T-2005-0007. In addition, requirements of this General Permit are consistent with Effluent Limitations Guidelines and New Source Performance Standards for the Construction and Development point source category. The Fact Sheet, which contains background information and rationale for General Permit requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through I are also incorporated into this Order.

**E. California Environmental Quality Act (CEQA).** This action to adopt a general NPDES permit is exempt from the provisions of Chapter 3 of the California

Environmental Quality Act (CEQA) (Public Resources Code section 21100, et seq.), pursuant to section 13389 of the California Water Code.

**F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations (40 CFR 122.44), require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards.

**G. Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category.** On December 1, 2009 the USEPA published final regulations establishing CWA technology-based Effluent Limitations Guidelines and New Source Performance Standards (NSPS) for the Construction and Development point source category (hereinafter, ELGs). 40 CFR Part 450 establishes technology-based effluent limitations based on best practicable technology (BPT), best available technology (BAT), best conventional pollutant control technology (BCT), and NSPS reflecting the best available demonstrated control technology.

1. For BPT and BCT, the ELGs establish requirements for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and outlet requirements.
2. For BAT and NSPS, the USEPA will be issuing as part of its ELGs for Construction and Development a daily maximum turbidity requirement that will be expected by August 2, 2011 for all dischargers disturbing 20 or more acres of land at one time<sup>1</sup>. Dischargers disturbing 10 or more acres of land will be required to meet this effluent limitation by February 2, 2014. In addition, requirements for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and surface outlets are also established.

**H. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the

---

<sup>1</sup> In an October 2010 Notice, the EPA acknowledged an error in calculating a turbidity limit of 280 NTU and issued a stay of the limit (75 Fed. Reg. 68215). This General Permit may be modified to incorporate any new turbidity limits adopted by the USEPA in accordance with 122.63, 122.64, and 124.5 of the CFR.

pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi). Waste discharge requirements of this General Permit also include effluent limitations for discharges as specified in the Basin Plan and carried forward from the prior General Permit

**I. Storm Water Benchmark Performance Levels.** This General Permit also contains concentration-based, pollutant-specific benchmark values for pH in effluent. The benchmarks and related monitoring and reporting requirements contained in this General Permit are consistent with the Basin Plan. The purpose of the benchmarks is to provide a measure of whether a facility's BMPs are meeting performance levels protective of water quality and beneficial uses. This General Permit requires Dischargers to take actions to evaluate excursions from objectives, improve BMP performance if needed when benchmarks are exceeded, and to conduct monitoring and documentation of such actions.

**J. Compliance with Effluent Limitations.** For purposes of this General Permit, effluent discharges off project boundaries constitute a discharge to surface waters or tributaries to surface waters. This finding is made due to the high degree of surface water connectivity in the Lake Tahoe watershed. Therefore, compliance with effluent limitations is required at specified runoff control points where effluent is discharged off project boundaries or to surface waters, including municipal separate storm sewer systems. Effluent limits for the discharge to surface waters or municipal separate storm sewer systems (MS4) may not apply if the discharger can document that effluent leaving the project boundaries does not reach surface waters or MS4s.

**K. Water Quality Control Plans.** The Lahontan Water Board adopted a *Water Quality Control Plan for the Lahontan Region* (Basin Plan), which became effective on March 31, 1995 and has been subsequently amended. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Designated beneficial uses of surface waters within the Lake Tahoe Hydrologic Unit include municipal and domestic supply (MUN); agricultural supply (AGR); groundwater recharge (GWR); freshwater replenishment (FRSH); water contact recreation (REC-1); non-contact water recreation (REC-2); cold freshwater habitat (COLD); cold spawning, reproduction, and development (SPWN); commercial and sport fishing (COMM); wildlife habitat (WILD); water quality enhancement (WQE); and flood peak attenuation/flood water storage (FLD). Waters at some locations may also be designated for navigation (NAV); preservation of biological habitats of special significance (BIOL); rare, threatened, or endangered species (RARE); and migration of aquatic organisms (MIGR). Table 5.1-1 in the

Basin Plan may be consulted for the beneficial use designations for any specific surface water body.

In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for MUN. Requirements of this General Permit implement the Basin Plan.

**L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

**M. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on turbidity, pH, nitrogen (total), phosphorus (total), iron (total), and grease and oil. In addition, the provisions of this General Permit require the implementation of Best Available Technologies/Best Control Technologies (BAT/BCT) and Best Management Practices (BMPs) to control and abate the discharge of pollutants in storm water discharges, and achieve the numerical and narrative standards of this General Permit and those contained in the Basin Plan. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

**N. Antidegradation Policy.** 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Lake Tahoe is an Outstanding National Resource Water under the federal policy and afforded the highest protections, such that no permanent or long-term reduction in water quality is allowed. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Lahontan Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Discharges in compliance with this General Permit will not result water quality less than that prescribed in policies and standards, and are therefore consistent with those policies and standards.

**O. Anti-Backsliding Requirements.** Sections 402(0)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(1) prohibit backsliding in NPDES permits. These anti-backsliding provisions require

effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this General Permit are at least as stringent as the effluent limitations in General Permit No. R6T-2005-0007. Therefore, this General Permit is in compliance with the anti-backsliding provisions of 40 CFR 122.44.

**P. Endangered Species Act.** This General Permit does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This General Permit requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

**Q. Monitoring and Reporting.** 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Lahontan Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements and is provided in Attachment C.

**R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. The Lahontan Water Board has also included in this General Permit special provisions applicable to authorized Dischargers. A rationale for the special provisions contained in this General Permit is provided in the attached Fact Sheet.

**S. Notification of Interested Parties.** The Lahontan Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this General Permit.

**T. Consideration of Public Comment.** The Lahontan Water Board, in a public meeting, provided an opportunity for a public hearing, and considered all comments pertaining to the discharge. Details are provided in the Fact Sheet of this General Permit.



**IT IS HEREBY ORDERED** that all Dischargers indicating their intention to be regulated under the provisions of this General Permit, and all heirs, successors, or assigns, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, shall comply with the following:

## **II. CONDITIONS FOR PERMIT COVERAGE AND NOTIFICATION REQUIREMENTS**

### **A. Legally Responsible Person**

To obtain authorization for discharges under this General Permit issued by the Lahontan Water Board, the project must meet the eligibility requirements specified in section II.D of this General Permit, and the legally responsible person (LRP) or LRPs Approved Signatory (see definition in Attachment B – Glossary) must certify and file Permit Registration Documents (PRDs). Applicants must provide PRDs, an appropriate filing fee, and any additional information, as specified in section II.D.4 as application for issuance of NPDES permit requirements. PRDs must be submitted electronically through the State Water Resources Control Board's (State Water Board's) Storm Water Multi-Application and Report Tracking System (SMARTS) at: <https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp>.

### **B. Permit Effective Date**

This General Permit is effective on April 14, 2011.

- 1. Dischargers Obtaining Coverage On or After April 14, 2011:** All dischargers requiring coverage under this General Permit on or after April 14, 2011, shall file the required PRDs and filing fee, and receive prior to commencing land disturbing activities a written Notice of Applicability (NOA) from the Lahontan Water Board indicating the date that the permit coverage begins under the General Permit and the Waste Discharger Identification (WDID) code issued for the project.
- 2. Dischargers Previously Covered Under General Permit R6T-2005-0007:** Previously covered dischargers subject to General Permit No. R6T-2005-0007 must comply with General Permit No. R6T-2005-0007 until the discharger re-enrolls and receives coverage under this General Permit, a notice of termination for the project is filed and processed, or December 1, 2011, whichever occurs first. On and after December, 2011, all coverage under General Permit No. R6T-2005-0007 is terminated. Previously enrolled dischargers failing to file PRDs or other information required to complete an application to renew coverage under this General Permit will lose permit coverage on December 1, 2011, and may be subject to enforcement remedies and liability for construction-related discharges without an NPDES permit.

### **C. General Permit Coverage**

1. The Discharger shall be subject to the requirements of and covered by this General Permit only after a WDID number has been issued by Lahontan Water Board staff. In order to demonstrate compliance with coverage requirements for this General Permit, the Discharger must be able to present documentation of a valid WDID upon request.
2. All Dischargers must implement the Storm Water Pollution Prevention Plan (SWPPP) and the Monitoring and Reporting Program, including their Construction Site Monitoring and Reporting Plan (CSMRP) prior to commencement of construction.
3. This General Permit does not pre-empt or supersede the authority of other agencies to prohibit, restrict, or control storm water discharges to municipal separate storm sewer systems or other watercourses within their jurisdictions.
4. This General Permit does not authorize the discharges of fill or dredged material regulated by the US Army Corps of Engineers under section 404 of the CWA and does not constitute water quality certification under section 401 of the CWA. Enrollment under this General Permit may be required for construction activities involving one or more acres of wetland disturbance in the Lake Tahoe Hydrologic Unit.
5. This General Permit does not authorize land disturbing activities in flood plains or stream environment zones (SEZs) unless an exemption to applicable waste discharge prohibitions is granted in writing.
6. Lahontan Water Board staff is authorized to issue a single WDID to a Discharger proposing multiple discharges at multiple locations within the Lake Tahoe Hydrologic Unit, provided that the nature of the discharges and the locations are reported and included in the application information provided with the PRDs for this General Permit.

### **D. Eligibility Criteria**

1. Discharges covered by this General Permit are limited to storm water discharges to surface waters and to land, and authorized non-storm water discharges to land that are associated with construction activities in the Lake Tahoe Hydrologic Unit (Department of Water Resources Hydrologic Unit No. 634.00) as described in any one of the categories listed below:
  - a. Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than one acre of total land area which are not part of a larger common plan of development or sale.

- b.** Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale that disturbs one or more acres.
  - c.** Construction activity that results in land disturbance of equal to or greater than one acre related to residential, commercial, or industrial development on lands currently used for agriculture or silviculture including, but not limited to, the construction of roads and buildings related to agriculture or silviculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.
  - d.** Construction activity that results in land disturbance of equal to or greater than one acre associated with linear underground/overhead utility projects including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities), underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.
  - e.** Construction activity that results in land disturbance of equal to or greater than one acre associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.<sup>2</sup>
- 2.** Activities specifically not required or eligible to be covered under this General Permit include:
  - a.** Disturbance to land associated with municipal facilities under an approved NPDES Storm Water Management Program for routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.
  - b.** Disturbances to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.
  - c.** Discharges of storm water from areas on tribal lands; construction on tribal lands is regulated by a separate federal permit.
  - d.** Construction activity that disturbs less than one acre of land surface, and that is not part of a larger common plan of development .

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<sup>2</sup> Pursuant to the Ninth Circuit Court of Appeals' decision in NRDC v. EPA (9th Cir. 2008) 526 F.3d 591, and subsequent denial of the USEPA's petition for reconsideration in November 2008, oil and gas construction activities discharging storm water contaminated only with sediment are no longer exempt from the NPDES program.

- e. Construction activity covered by an individual NPDES Permit for storm water discharges.
        - f. Discharges of storm water identified in section 402(l)(2) of the CWA, 33 USC section 1342(l)(2).
  - 3. Upon receipt of the appropriate PRDs, Lahontan Water Board staff will determine if such a discharge satisfies all of the following conditions:
    - a. The discharge will be generated from construction activity that does not include any other waste discharge activities, except for those described for authorized non-storm water discharges in section III of this General Permit.
    - b. The project does not include permanent disturbance to lands classified as SEZs as defined in the Basin plan, unless the Lahontan Water Board grants an exemption explicitly in writing.
    - c. The amount of proposed coverage is equal to or less than that allowed by the Basin Plan.
    - d. The project incorporates appropriate BMPs and low-impact development (LID) techniques, as feasible, to infiltrate and/or treat storm water runoff from existing and proposed impervious surfaces on the site as required in this General Permit.
    - e. The project plans include a SWPPP that proposes specific temporary and permanent measures to prevent the discharge of pollutants from the site.
    - f. The project plans include projected dates for:
      - i. Completion of construction;
      - ii. Completion of storm water infiltration and/or treatment facilities; and
      - iii. Completion of any necessary restabilization and revegetation.
  - 4. Dischargers are eligible for coverage under this General Permit provided that the Discharger submits PRDs and the proper fee to the State Water Board before starting construction activities. Dischargers previously covered under Permit R6T-2005-0007 must submit their PRDs and receive approval before continuing construction activities after December 1, 2011. PRDs shall include the Notice of Intent (NOI), site maps, and SWPPP. If an Active Treatment System (ATS) is proposed to be used, information required in Attachment E must also be submitted as part of the PRDs. An ATS is distinct from other BMPs in that they include the use of chemical coagulation, chemical flocculation, or electro-coagulation to aid in the reduction of turbidity. For proposed construction activity on easements or on nearby property by agreement or permission, the entity

responsible for the construction activity must submit the PRDs and filing fee, and shall be responsible for development of the SWPPP. The NOI must be signed in accordance with the signatory requirements of the Standard Provisions (Attachment D).

The filing fee shall be submitted to:

State Water Resources Control Board  
P.O. Box 1977  
Sacramento, CA 95812

Or hand delivered to:

State Water Resources Control Board  
1001 I Street  
Sacramento, CA 95814

5. Construction activities that involve alteration of a lake bed or stream channel may require prior written agreement with the California Department of Fish and Game. A copy of the written agreement, if any, or agreement waiver must be submitted with the NOI.
6. The Discharger, upon written request, submits additional information necessary to ascertain whether the discharge meets the criteria for coverage under this General Permit.
7. No discharge under this General Permit is authorized until a written WDID is issued from the Lahontan Water Board with the Notice of Applicability.
8. Notwithstanding the provisions of this section, appropriate projects may be brought to the Lahontan Water Board for consideration of adoption of an individual NPDES Permit when the Executive Officer deems it desirable or necessary to do so.

#### **E. Termination of Coverage**

1. When an individual NPDES permit is issued to a Discharger for those types of discharges that otherwise would be subject to this General Permit, the applicability of this General Permit to the Discharger is automatically terminated on the effective date of the individual permit.
2. When construction is complete and the lands have been stabilized from erosion, the discharger shall electronically file a Notice of Termination (NOT), a final site map, and photos through the State Water Board's SMARTS as a request to terminate permit coverage. The discharger shall certify through the filing that all General Permit requirements have been met including final stabilization conditions. The Discharger is required to pay the annual fee (as specified in the

annual billing received from the State Water Board) until the permit coverage is officially terminated in writing by the Lahontan Water Board. If the project lands are transferred to new ownership before construction is complete, the owner subject to this General Permit must temporarily stabilize the site, and electronically file an NOT, current site map, and photos through the SMARTS. The new owner must also apply for coverage under this General Permit as described above and may be liable construction related discharges without an NPDES permit for any period when the project is not covered under this General Permit.

3. Prior to the termination of coverage under this General Permit, the following conditions must be met:
  - a. The construction project is complete and there is no potential for construction related storm water pollution or pollutant discharges.
  - b. All construction materials and waste have been removed from the project site and disposed of properly.
  - c. All elements of the SWPPP have been completed.
  - d. Permanent BMPs have been installed and all disturbed soil areas are stabilized to prevent and control erosion.
  - e. For stabilization measures that will mature over time (e.g., cut and fill slopes or other mass graded areas that are mulched and seeded), the discharger shall demonstrate that the site will not pose any additional sediment discharge risk than it did prior to the commencement of construction. This condition shall be demonstrated by:
    - i. Modeling results using the Revised Universal Soil Loss Equation (RUSLE) or RUSLE2 (detailed information may be found at the USDA website <http://www.ars.usda.gov/Research/docs.htm?docid=5971>), including computational proof or
    - ii. Site-specific evaluation of stability, with consideration of parameters such as percent total cover, percent vegetative cover, vegetation type, soil nutrient and organic matter content, and soil infiltration rate.

For these areas, the discharger shall also certify that a plan is in place to monitor and maintain such measures until they are self-sustaining.

  - f. Information required in the Monitoring and Reporting Program has been submitted.
  - g. Lahontan Water Board staff has inspected the site, if necessary.

4. If revocation of coverage under the General Permit is denied, Lahontan Water Board staff will provide written notification with the reasons for denial.

### **III. DISCHARGE PROHIBITIONS**

Non-storm water discharges to surface waters are prohibited unless granted an exemption in accordance with requirements in the Basin Plan for eligible projects (restoration projects and those listed in Attachment F) and must meet the numeric effluent limitations in section IV of this General Permit unless granted an exemption in accordance with Basin Plan policy.

- A. Unless otherwise authorized by a separate NPDES permit, discharges of material other than storm water to a municipal separate storm sewer system or waters of the United States are prohibited.
- B. Discharges of non-storm water to land or land-based treatment systems may be necessary for certain construction projects. Such discharges include, but are not limited to, irrigation of vegetation erosion control measures, pipe flushing and testing, and construction dewatering. These discharges to land are authorized under the following conditions:
  1. The discharge does not violate any other provision of this General Permit.
  2. The discharge is not prohibited by the Basin Plan or does not require a prohibition exemption from the Lahontan Water Board for prohibitions contained in the Basin Plan.
  3. The Discharger has included and implemented specific BMPs required by this General Permit to prevent or reduce the contact of the non-storm water discharge with construction materials or equipment.
  4. The discharge does not contain toxic constituents in toxic amounts.
- C. The removal of vegetation or disturbance of ground surface conditions between October 15 and May 1 is prohibited. Where it can be shown that granting a variance would not cause or contribute to the degradation of water quality, an exception to the dates stated above may be granted in writing by the Executive Officer.
- D. At no time shall surplus or waste earthen materials be placed in surface water drainage courses, within the 100-year flood plain of any surface water, below the high water line of Lake Tahoe, or in such a manner as to allow the discharge of such materials to adjacent undisturbed land or to any surface water or surface water drainage course.
- E. The discharge or threatened discharge, attributable to human activities, of solid or liquid waste materials, including soil, silt, clay, sand and other organic earthen

materials, to lands below the highwater rim of Lake Tahoe or within the 100-year floodplain of any tributary to Lake Tahoe, is prohibited.

- F.** The discharge of threatened discharge, attributable to new development in SEZs, of solid or liquid waste, including soil, silt, sand, clay, rock, metal, plastic, or other organic mineral or earthen materials to SEZs in the Lake Tahoe Basin is prohibited.
- 1.** Section 5.2 of the Basin Plan contains prohibitions against the discharge of non-storm water wastes to surface waters, including SEZs and 100-year floodplains in Lake Tahoe Hydrologic Unit, which are described in Attachment F of this General Permit. The prohibitions in Attachment F apply to discharges from construction activity. (Any discharge proposed where a discharge prohibition may apply must be evaluated on an individual basis prior to issuing General Permit coverage to determine if the discharge would violate the prohibition. In some instances, exemptions may be granted on a case-by-case basis by resolution of the Lahontan Water Board, or by the Executive Officer in accordance with Lahontan Water Board Policy. More detailed information on exemption criteria and processing is presented in Attachment F).

#### **IV. EFFLUENT LIMITATIONS**

Storm water runoff generated from land disturbing activities should be infiltrated to the extent possible. Runoff that is allowed to discharge off the project boundaries must meet the following effluent limitations.

- A.** All storm water runoff generated within the project area which is discharged to surface waters or municipal separate storm sewer systems must not contain constituents in excess of the following numeric effluent limitations (NELs):

**Table 3. Storm Water Effluent Limitations**

| Parameter  | Units | Maximum Daily Effluent Limitations For Discharge |
|--|-------|--|
| Total Nitrogen (as N)  | mg/L  | 0.5  |
| Total Phosphorus (as P)  | mg/L  | 0.1  |
| Total Iron   | mg/L  | 0.5  |
| Turbidity  | NTU   | 20*  |
| Grease and Oil   | mg/L  | 2  |
| Note* - For ATS use, 10 NTU as daily average and 20 NTU for any single sample. |       |  |

- B.** All waters generated within the project area, or as a result of the development of the project, that are discharged to surface waters or municipal storm sewer systems must not contain the following:



1. Substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or animal life; and
  2. Coliform organisms attributable to human wastes.
- C. For protection of receiving waters the pH of effluent samples should not fall outside of the range of 6.0 to 9.0. This range is set as a numeric benchmark level. If the pH of effluent is outside of the benchmark, the discharger must investigate the cause of the excursion and implement appropriate corrective measures. If the pH levels are determined to be from natural causes, the discharger must provide data (e.g., from run-on) to demonstrate this condition.

## **V. RECEIVING WATER LIMITATIONS**

### **A. Surface Water Limitations**

The following numerical and/or narrative water quality objectives apply to all surface waters, including wetlands, in the Lahontan Region. Effluent from construction sites must not cause or contribute to the violation of the objectives. The discharge of waste to surface waters must comply with the following limitations:

1. The discharge shall not cause a violation of any applicable water quality standard for receiving water adopted by the Lahontan Water Board or State Water Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. Discharges shall not cause the receiving water quality objectives listed in Attachment G to be exceeded for the specified surface waters and tributaries thereto. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA or amendments thereto, the Lahontan Water Board may revise and modify this General Permit in accordance with such more stringent standards.
2. The discharge of storm water from within the project area to surface waters or municipal separate storm sewer systems must not cause or contribute to a violation of the following water quality objectives applicable to receiving waters for the discharge.
  - a. **Algal Growth Potential.** For Lake Tahoe, the mean algal growth potential at any point in the Lake shall not be greater than twice the mean annual algal growth potential at the limnetic reference station (located in the north central portion of Lake Tahoe)
  - b. **Ammonia.** Ammonia concentrations shall not exceed the values listed for the corresponding conditions in these tables. For temperature and pH values not explicitly in the tables, the most conservative value neighboring

the actual value may be used or criteria can be calculated from numerical formulas developed by the USEPA.

- c. **Bacteria, Coliform.** Waters shall not contain concentrations of coliform organisms attributable to anthropogenic sources, including human and livestock wastes. The fecal coliform concentration during any 30-day period shall not exceed a log mean of 20 MPN/100 mL, nor shall more than 10 percent of all samples collected during any 30-day period exceed 40 MPN/100 mL.
- d. **Biological Indicators.** For Lake Tahoe, algal productivity and the biomass of phytoplankton, zooplankton, and periphyton shall not be increased beyond the levels recorded in 1967 – 71, based on statistical comparison of seasonal and annual means.
- e. **Biostimulatory Substances.** Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.
- f. **Chemical Constituents.** Waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified by the more restrictive of the California Code of Regulations (CCR), Title 22, Division 4, Chapter 15, or 40 CFR Part 141.
- g. **Chlorine, Total Residual.** For the protection of aquatic life, total chlorine residual shall not exceed either a median value of 0.002 mg/L or a maximum value of 0.003 mg/L. Median values shall be based on daily measurements taken within a 6-month period.
- h. **Clarity.** For Lake Tahoe, the vertical extinction coefficient shall be less than 0.08 per meter when measured below the first meter. When water is too shallow to determine a reliable extinction coefficient, the turbidity shall not exceed 3 NTU. In addition, turbidity shall not exceed 1 NTU in shallow waters not directly influenced by stream discharges.
- i. **Color.** Waters shall be free of coloration that causes nuisance or adversely affects the water for beneficial uses.
- j. **Conductive Electrical.** In Lake Tahoe, the mean annual electrical conductivity shall not exceed 95 µmhos/cm at 50 °C at any location in the Lake.
- k. **Dissolved Oxygen.** The dissolved oxygen concentration, as percent saturation, shall not be depressed by more than 10 percent, nor shall the

minimum dissolved oxygen concentration be less than 80 percent of saturation. The minimum dissolved oxygen concentration shall not be less than 7.0 mg/L for Lake Tahoe, or that specified in Table 3-6 of the Basin Plan for other water bodies.

- l. Floating Materials.** Waters shall not contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses. For natural high quality waters, the concentrations of floating material shall not be altered to the extent that such alterations are discernible at the 10 percent significance level.
- m. Oil and Grease.** Waters shall not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect the water for beneficial uses. For natural high quality waters, the concentration of oils, greases, or other film or coat generating substances shall not be altered.
- n. Nondegradation of Aquatic Communities and Populations.** All waters shall be free of substances attributable to wastewater or other discharges that produce adverse physiological responses in humans, animals, or plants; or which lead to the presence of undesirable or nuisance aquatic life. All waters shall be free from activities that would substantially impair the biological community as it naturally occurs due to physical, chemical and hydrologic processes.
- o. Pesticides.** For the purposes of this Basin Plan, pesticides are defined to include insecticides, herbicides, rodenticides, fungicides, piscicides and all other economic poisons. An economic poison is any substance intended to prevent, repel, destroy, or mitigate the damage from insects, rodents, predatory animals, bacteria, fungi or weeds capable of infesting or harming vegetation, humans, or animals (CA Agriculture Code 12753).

Pesticide concentrations, individually or collectively, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall not be an increase in pesticide concentrations found in bottom sediments. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life.

Waters designated as MUN shall not contain concentrations of pesticides or herbicides in excess of the limiting concentrations set forth in CCR, Title 22, Division 4, Chapter 15.
- p. pH.** In fresh waters with designated beneficial uses of COLD or WARM, changes in normal ambient pH levels shall not exceed 0.5 pH units. In Lake Tahoe, the pH shall not be depressed below 7.0 nor raised above

8.4. Changes in normal ambient pH levels in Lake Tahoe shall not exceed 0.5 pH units.

- q. **Plankton Count.** For Lake Tahoe, the mean seasonal concentration of plankton organisms shall not be greater than 100 per ml and the maximum concentration shall not be greater than 500 per ml at any point in the Lake.
- r. **Radioactivity.** Radionuclides shall not be present in concentrations which are deleterious to human, plant, animal, or aquatic life or which result in the accumulation of radionuclides in the food web to an extent which presents a hazard to human, plant, animal, or aquatic life.

Waters shall not contain concentrations of radionuclides in excess of the limits specified by the more restrictive of the CCR, Title 22, Division 4, Chapter 15, or 40 CFR Part 141.

- s. **Sediment.** The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses. The suspended sediment concentration shall not exceed a 90<sup>th</sup> percentile value of 60 mg/L in tributaries to Lake Tahoe.
- t. **Settleable Materials.** Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high quality waters, the concentration of settleable materials shall not be raised by more than 0.1 ml/L.
- u. **Suspended Materials.** Waters shall not contain suspended materials in concentrations that cause nuisance or that adversely affect the water for beneficial uses. For natural high quality waters, the concentration of total suspended materials shall not be altered to the extent that such alterations are discernible at the 10 percent significance level.
- v. **Taste and Odor.** Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish or other edible products of aquatic origin, that cause nuisance, or that adversely affect the water for beneficial uses. For naturally high quality waters, the taste and odor shall not be altered.
- w. **Temperature.** The natural receiving water temperature of all waters shall not be altered unless it can be demonstrated to the satisfaction of the Lahontan Water Board that such an alteration in temperature does not adversely affect the water for beneficial uses. For waters designated WARM, water temperature shall not be altered by more than 5 degrees Fahrenheit (5 °F) above or below the natural temperature. For waters designated COLD, the temperature shall not be altered.

- x. Toxicity.** All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration and/or other appropriate methods as specified by the Lahontan Water Board.

The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge, or when necessary, for other control water that is consistent with the requirements for “experimental water” as defined in *Standard Methods for the Examination of Water and Wastewater (American Public Health Association, et al. 1998)*.

- y. Transparency.** For Lake Tahoe, the secchi disk transparency shall not be decreased below the levels recorded in 1967 – 71, based on a statistical comparison of seasonal and annual mean values.
- z. Turbidity.** Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity shall not exceed natural levels by more than 10 percent.

## **VI. PROVISIONS**

### **A. Standard Provisions**

1. The Discharger shall comply with all Standard Provisions included in Attachment D, which are made part of this General Permit.

### **B. Reopener Provisions**

1. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal Water Pollution Control Act or amendments thereto, the Lahontan Water Board may revise and modify this General Permit in accordance with such more stringent standards.
2. The Lahontan Water Board may reopen this General Permit to establish new conditions or effluent limitations should monitoring data or other new information indicate that a constituent is discharged at a level that will do any of the following:
  - a.** Cause, have reasonable potential to cause, or contribute to an in-stream excursion above any water quality criteria or objective, or

- b.** Cause, have reasonable potential to cause, or contribute to a violation of any narrative water quality objective from the Basin Plan.
- 3.** The Lahontan Water Board may reopen this Order to reflect any site-specific objectives established for the waterbody or changes to beneficial uses for the waterbody resulting from a use attainability analysis or Basin Plan amendment.
- 4.** The Lahontan Water Board may reopen this General Permit to reflect any changes by amendments to the Implementation Chapter of the Basin Plan.
- 5.** The Lahontan Water Board may reopen this permit to include the maximum daily turbidity limit being developed by the USEPA as part of the technology-based ELGs and NSPSs developed for the Construction and Development point source category.

## **B. Provisions for Administrative Continuance**

This General Permit continues in force and effect until a new General Permit is issued or the Lahontan Water Board rescinds this General Permit.

## **C. Additional Provisions**

- 1.** The Discharger shall comply with the following additional provisions:
  - a.** Failure to comply with this permit may constitute a violation of the CWC and or the CWA, and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.
  - b.** The CWC and the CWA provide for civil liability and criminal penalties for violations of the permit limits including imposition of civil liability or referral to the Attorney General.
  - c.** Provisions of the permit are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.
  - d.** Pursuant to CWC section 13263(g), no discharge of waste into the waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.
  - e.** Pursuant to CWC section 13260(c), any change in the ownership and/or operation of property subject to the NPDES permit shall be reported to the Lahontan Water Board. Notification of applicable NPDES Permit requirements shall be furnished in writing to the new owners and/or

operators, and a copy of such notification shall be sent to the Lahontan Water Board.

- f.** If a Discharger becomes aware that any information submitted to the Lahontan Water Board is incorrect, the Discharger shall immediately notify the Lahontan Water Board, in writing, and correct that information.
  - g.** Pursuant to CWC section 13267 and/or section 13383, the Discharger shall comply with the CSMRP, and future revisions thereto, in Attachment C of this General Permit, and any additional monitoring requirements as specified by the Lahontan Water Board Executive Officer.
- 2.** Unless specifically granted in writing by the Lahontan Water Board, authorization pursuant to this General Permit does not constitute an exemption to applicable discharge prohibitions prescribed in the Basin Plan.
- 3.** All Dischargers must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to drainage systems or other water courses under their jurisdiction, including applicable requirements in municipal storm water management programs developed to comply with NPDES General Permits issued to local agencies by the Lahontan Water Board.
- 4.** The Discharger shall at all times fully comply with engineering plans, specifications, and technical reports submitted with the PRDs.
- 5.** The Discharger shall at all times fully comply with the SWPPP and Rain Event Action Plan (REAP).
- 6.** In accordance with section 13260 of the California Water Code, the Discharger shall file a report with the Lahontan Water Board of any material change or proposed change in the character, location, or volume of the discharge. Any proposed material change in the operation shall be reported to the Executive Officer at least 30 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant new soil disturbances, all proposed expansion of development, and increase in impervious surface coverage, or any change in drainage characteristics at the project site.
- 7.** Board Order No. R6T-2005-0007 is rescinded on December 1, 2011, except for enforcement purposes.

## **VII. TRAINING QUALIFICATIONS AND CERTIFICATIONS REQUIREMENTS**

### **A. General**

The discharger shall ensure that persons responsible for developing and implementing storm water pollution controls specified this General Permit shall be appropriately trained and certified in accordance with the requirements below. Additionally, project SWPPP requirements shall be communicated to all contractor and subcontractor personnel conducting activities that could affect storm water runoff quality. Training may be both formal and informal, as appropriate, and shall at a minimum be provided during pre-construction meetings and regular tailgate meetings conducted during the course of the project.

The discharger shall provide documentation of required qualifications and training in the Annual Report for persons responsible for implementing the requirements of this General Permit.

### **B. SWPPP Certification Requirements**

- 1. Qualified SWPPP Developer:** The discharger shall ensure that SWPPPs are written, amended and certified by a Qualified SWPPP Developer (QSD). A QSD shall have one of the following registrations or certifications, and appropriate experience, as required for:
  - a.** A California registered professional civil engineer
  - b.** A California registered professional geologist or engineering geologist;
  - c.** A California registered landscape architect;
  - d.** A professional hydrologist registered through the American Institute of Hydrology;
  - e.** A Certified Professional in Erosion and Sediment Control (CPESC) <sup>TM</sup> registered through Enviro Cert International, Inc;
  - f.** A Certified Professional in Storm Water Quality (CPSWQ) <sup>TM</sup> registered through Enviro Cert International, Inc.; or
  - g.** A professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET).



2. **Required QSD Training:** Effective on April 13, 2012, a QSD shall have attended a State Water Board-sponsored or -approved QSD training course and pass a required examination covering the course material.
3. **Qualified SWPPP Practitioner:** The Discharger shall ensure that all BMPs required by this General Permit are implemented by a Qualified SWPPP Practitioner (QSP). A QSP is a person responsible for non-storm water and storm water visual observations, sampling and analysis. Effective April 13, 2012, a QSP shall be either a QSD or have one of the following certifications:
  - a. A certified erosion, sediment and storm water inspector registered through Enviro Cert International, Inc.; or
  - b. A certified inspector of sediment and erosion control registered through Certified Inspector of Sediment and Erosion Control, Inc.
4. **Required QSP Training:** Effective April 13, 2012, a QSP shall have attended a State Water Board-sponsored or -approved QSP training course and pass a required examination covering the course material..

## **VIII. BEST MANAGEMENT PRACTICES (BMPs)**

Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants. Storm water controls and control locations must be described in the SWPPP for the project site. At a minimum, the following types of storm water control measure BMPs must be described in the SWPPP and implemented for the project.

### **A. Site Management**

Dischargers shall implement appropriate site management measures to control pollutants in site runoff for construction materials that are potential threats to water quality if discharged. The control measures shall include, but are not limited to, the following items.

1. Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e., poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

- 2.** Identify potential pollutant sources and areas of the site where BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant source list shall identify all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, the discharger shall:

  - a.** Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.
  - b.** Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.
  - c.** Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.
- 3.** Ensure retention of sampling, visual observation, and inspection records.
- 4.** Store chemicals in watertight containers with appropriate secondary containment to prevent any spillage or leakage, and protect from precipitation and surface run-on.
- 5.** Separate snow storage and disposal areas from surface waters to prevent direct discharge and avoid surface runoff. Treatment and retention capacity of storm water basins and similar facilities on the land surface must not be compromised by storage of accumulated snow, other than by direct precipitation. Treatment facilities shall be designed to accommodate snowmelt runoff from designated snow storage and disposal areas.
- 6.** Protect permanent infiltration facilities from receiving turbid discharges or other polluted storm water runoff. If permanent infiltration facilities are used as temporary BMPs, the capacity and functionality of the facilities shall be maintained and/or renovated as needed to ensure pre-project capacity and function prior to requesting General Permit termination.
- 7.** Prevent the discharge of pollutants from sanitation facilities (e.g., portable toilets) to the storm water drainage system or receiving water. Sanitation facilities shall be cleaned/replaced as necessary, and inspected regularly for leaks and spills.

- 8.** Cover waste disposal containers at the end of every business day and during a rain event.
- 9.** Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.
- 10.** Protect all loose piles of soil, silt, clay, sand, debris, or other earthen materials such that sediment is prevented from leaving the site.
- 11.** Prevent ground compaction and disturbance activities in unpaved areas not subject to construction. All non-construction areas shall be protected be identified and protected by fencing or other means to limit access. These control measures shall be inspected periodically and shall be repaired when necessary to maintain effectiveness.
- 12.** Develop a spill response plan prior to commencement of construction activities. The plan shall include:
  - a.** Descriptions of equipment and materials required to be on site for cleanup of spills/leaks, and
  - b.** Descriptions of appropriate spill response procedures, the responsible personnel, and the training records of such personnel.
- 13.** Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.
- 14.** Prevent the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters.
- 15.** Conduct equipment and vehicle fueling, maintenance and repair activities only in designated areas with appropriate BMPs.
- 16.** By October 15 of each year, all disturbed areas shall be permanently stabilized or temporarily winterized. Winterized means to implement appropriate BMPs to prevent and minimize erosion and soil movement from the site in storm water in a manner that will remain effective until May 1 of the following year.

## **B. Sediment and Erosion/Stabilization Controls**

Dischargers shall implement a combination of sediment and erosion controls to prevent or minimize sediment discharges from the site. Control measures shall include, but are not limited to, the following items.

1. Install temporary sediment controls for the down gradient perimeter of the project site, and/or any location where storm water may discharge from the project site, prior to the initiation of any construction related activities.
2. Install temporary gravel bag dikes, fiber rolls, filter fabric fence, or other equivalent measures as necessary to control erosion and runoff.
3. Install temporary check dams such as gravel bag dikes in concentrated flow lines to slow and detain water flows and retain sediment.
4. Protect drain inlets and outfall structures with appropriate controls to minimize and control erosion and sediment discharge.
5. Prevent off-site tracking of earthen materials from the construction site onto adjacent roads and public ways. The Discharger shall control access points, install stabilized entrances/exits for vehicle and equipment traffic operating on the site, and implement sweeping as necessary where tracking prevention is not complete.
6. Provide and maintain natural buffers around surface waters and direct storm water runoff to vegetated areas, unless infeasible.
7. If used, sediment basins must be designed according to the methods provided in California Storm Water Quality Association's (CASQA's) Construction BMP Guidance Handbook or equivalent (<http://www.cabmphandbooks.com/>).
8. Control storm water volume and velocity within the site to minimize soil erosion and offsite discharge.
9. Direct all run-on from offsite, to the maximum extent possible, away from all disturbed areas.
10. Surface flows from the project site shall be controlled to prevent downstream erosion at any point.

- 11.** Control the amount of soil exposed to erosion at any particular time during construction activity.
- 12.** Control soil compaction and preserve topsoil as feasible.
- 13.** Implement an effective combination of temporary sediment and erosion controls on disturbed soil areas (DSAs) prior to the onset of precipitation events.
- 14.** Permanently stabilize from erosion or vegetate all finished graded areas. Vegetated and revegetated areas shall be identified with the specifications for successful vegetation growth and soil cover and maintained as needed to ensure adequate growth and root development until vegetation becomes established. If mulch cover only is used for stabilization from erosion, the Discharger must demonstrate the mulch will provide ongoing effectiveness in preventing soil erosion. The following measures are recommended:
  - a.** Depending on the level of disturbance and site conditions, wood chip mulch, pine needle mulch, rock, or other suitable materials may be applied on disturbed surfaces in lieu of vegetation;
  - b.** Whenever practical seeds collected from the project site area should be added to the seed mix being applied during revegetation; and
  - c.** Whenever practical, natural revegetation and native mulch will be the preferred method of stabilization.
- 15.** Wind erosion shall be controlled to prevent nuisance and to prevent the transport of dust and soil particles into the air, off the project site, into any surface waters, or into any drainage course.

### **C. Construction Site Dewatering or Diversions**

Unless granted an exemption in accordance with the Basin Plan for eligible projects, construction site dewatering waste must not be discharged to surface waters or tributaries thereto, including municipal separate storm sewer systems. Clear water diversions are authorized under this General Permit.

Prior to conducting dewatering or clear water diversion activities, the Discharger must prepare a dewatering/diversion plan as part of the SWPPP. Lahontan Water Board staff may require the Discharger to submit the

dewatering/diversion plan for review prior to commencement of the waste discharges.

The dewatering/diversion plan shall, at a minimum, include the following:

1. The location of the discharge area or outfall and name of receiving water.
2. A description of the discharge or diversion method and plan drawings as necessary.
3. The frequency and estimated volume and rate of discharge.
4. Expected pollutants and concentration in discharge, and control measures to be applied and maintained for pollutant control.
5. Planned effluent and/or receiving water monitoring (visual and other).  
Parameters to be monitored for discharges to surface waters or municipal storm sewer systems include turbidity, total nitrogen, and total phosphorus. In addition, receiving water monitoring may be appropriate for dewatering discharges to wetlands, SEZs, and floodplains.

#### **D. Inspection, Maintenance and Repair**

Dischargers shall conduct BMPs inspections in accordance with the requirements of the Monitoring and Reporting Program described in Attachment C. Dischargers shall ensure that all inspection, maintenance and repair work is performed or supervised by a QSP representing the Discharger. The QSP may delegate any or all of these activities to an employee appropriately trained to do the tasks.

Upon identifying BMPs failures or shortcomings, as directed by the QSP, dischargers shall conduct maintenance or repair of failed or inadequate BMPs within 72 hours of identification, or before the next predicted rain event, whichever is sooner.

#### **E. Rain Event Action Plan (REAP)**

From the dates of May 1 through October 15 of each year, and during periods in which construction activity is conducted under a variance to the land disturbance prohibition of this General Permit, the discharger shall ensure a QSP develops a REAP no later than the calendar day 24 hours prior to any anticipated precipitation event. An anticipated precipitation event is any weather pattern that is forecast to have a 30 percent or greater chance of producing precipitation as rainfall in the project area. During periods when thunderstorm activity is anticipated, the discharger shall monitor weather conditions during the course of the day, and prepare and implement a REAP if the chance of thunderstorms becomes 30 percent or greater, or when visual observations indicate imminent precipitation. The QSP shall obtain, for each day of construction operations, a printed copy of precipitation forecast information from the National Weather Service (NWS) Forecast Office and

keep the copy with the SWPPP monitoring records. Dischargers may access the daily forecasts by entering the zip code of the project's location at the following website: <http://www.srh.noaa.gov/forecast>.

The REAP shall be available onsite, and a QSP shall begin to implement the REAP prior to the onset of an actual precipitation event. The REAP must be checked and updated daily for storms expected to last over a period of several days.

The REAP shall be developed for all phases of construction until the permit coverage is terminated by the Lahontan Water Board. A REAP template is included in Attachment H.

A REAP, at a minimum, shall include:

1. QSP name and contact number;
2. The date(s) rain is predicted to occur, and predicted chance of rain;
3. A description of all DSAs, material storage areas, stockpiles, vehicle and equipment storage and maintenance areas, and waste management areas. These areas must be cross-referenced to BMP plans or DSA maps by sheet or page number;
4. For each area described above, list specific items to review and actions to perform prior to the rain event;
5. A certification by the QSP that the REAP will be carried out as required by this Permit; and
6. A printout of the NWS weather forecast.

#### **F. Active Treatment Systems (ATS)**

Dischargers choosing to implement an ATS on a project site shall comply with all of the requirements in Attachment E of this General Permit.

#### **G. Post-Construction Storm Water Control Requirements**

##### **Municipal and Public Roadway Storm Water Treatment Requirements:**

Municipal jurisdictions and state highway departments must design projects to meet requirements in the respective municipal storm water NPDES permits.

##### **New Development, Redevelopment, and Existing Development Storm Water Treatment Requirements:**

For new development, re-development, and existing development retrofit projects, dischargers shall implement low-impact development (LID) techniques and infiltrate stormwater runoff from

impervious surfaces and other developed areas where natural percolation of precipitation is impeded following completion of construction. At a minimum, permanent storm water infiltration facilities must be designed and constructed to infiltrate runoff generated by the 20 year, 1-hour storm which equates to approximately one inch of runoff during a 1-hour period.

Where conditions permit, project proponents are encouraged to consider designing post-construction runoff controls in accordance with LID techniques and infiltration facilities to accommodate runoff volumes in excess of the 20 year, 1-hour storm to provide additional storm water treatment. Additional information on LID can be found at the National LID Clearinghouse website: <http://www.lid-stormwater.net/clearinghouse/index.html>.

Runoff from parking lots, retail and commercial fueling stations, and other similar land uses may contain oil, grease, and other hydrocarbon pollutants. Project proponents designing treatment facilities for these areas must include pre-treatment devices to remove hydrocarbon pollutants prior to infiltration or discharge and contingency plans to prevent spills from polluting groundwater.

Infiltrating runoff volumes generated by the 20 year, 1-hour storm may not be possible in some locations due to shallow depth to seasonal groundwater levels, unfavorable soil conditions, or other site constraints such as existing infrastructure or rock outcroppings. In the event that site conditions do not provide opportunities to infiltrate the runoff volume generated by a 20 year, 1-hour storm, project proponents must either (1) provide information showing how treatment facilities are expected to meet the numeric effluent limits in Table 5.6-1 of the Basin Plan, or (2) document written acceptance by the local municipality or state highway department to demonstrate that the publicly-owned or municipal storm water treatment facilities treating private property storm water discharges are sufficient to provide adequate treatment to meet any average annual fine sediment and/or nutrient load reduction requirements that may be established by the Lahontan Water Board for the municipality.

## **IX. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)**

The Discharger must develop and implement a SWPPP to meet the objectives specified below. This General Permit establishes the following requirements for the development and implementation of a SWPPP. Lahontan Water Board staff may require additional information to be added in a SWPPP depending on the nature or complexity of a project. A suggested outline for developing the SWPPP is provided in Attachment I.

### **A. OBJECTIVES**

A SWPPP shall be developed and implemented for each construction site covered by this permit. The SWPPP shall be designed to comply with



requirements to implement BMPs to achieve compliance with effluent limits and receiving water objectives. The SWPPP shall be developed and amended, when necessary, to meet the following objectives:

1. Identify pollutant sources including sediment sources that may affect the quality of storm water discharges associated with construction activity.
2. Identify non-storm water discharges.
3. Identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in storm water discharges and authorized non storm water discharges from the construction site.
4. Identify all effluent discharge outfall locations, sampling and analysis strategy and protocols, and a sampling schedule for discharges from the identified outfalls for the project area.

#### **B. PERMIT REGISTRATION DOCUMENTS (PRDs)**

The SWPPP shall include a copy of the Notice of Intent (NOI).

#### **C. SWPPP CERTIFICATION AND TRAINING REQUIREMENTS**

1. The SWPPP must be prepared, signed, and certified by a QSD, who meets the requirements as described in section VII.B. of this General Permit. The SWPPP must also identify the QSP, as defined in section VII.B of this Permit.
2. The SWPPP shall include procedures to ensure that all required inspections, maintenance, and repair activities are consistent with the requirements of this General Permit. These procedures shall include identification of specific personnel and the training required to perform inspections, maintenance, and repair (i.e., by a QSP).

#### **D. AVAILABILITY AND PUBLIC RECORDS ACCESS**

The SWPPP and any amendments shall be kept on site during construction activity and made available upon request of a representative of the Regional Water Board or any local storm water management agency which receives the storm water discharge.

The SWPPP is considered a report that shall be available to the public under Section 308(b) of the CWA. Upon request by members of the public, the discharger shall make available for review a copy of the SWPPP directly to the requestor.

## **E. LIST OF CONTRACTORS/SUBCONTRACTORS**

The SWPPP shall contain a list of all contractors and subcontractors responsible for implementing the SWPPP. This information shall be added to the SWPPP once the contractors and subcontractors selected to implement the SWPPP are determined

## **F. REQUIRED CHANGES**

1. The Discharger shall amend the SWPPP whenever there is a change in construction, or operations, which may affect the discharge or pollutants to surface waters, ground waters, or a municipal storm drain system. The Lahontan Water Board may require SWPPP amendments be submitted for review and may require modifications.
2. The Discharger shall maintain the SWPPP such that it reflects the actual site conditions for the duration of the project, including keeping DSA maps current as the project progresses. Changes in BMP implementation features or activities shall be documented and included as amendments to the SWPPP. An amendment log shall be maintained in the SWPPP that summarizes all changes to the SWPPP for the duration of the project.
3. Lahontan Water Board staff, or a local agency with the concurrence of the Lahontan Water Board staff, may require the discharger to amend the SWPPP if it is in violation of any condition of this General Permit.

## **G. PROJECT INFORMATION**

The SWPPP shall include the following information:

1. A copy of the NPDES permit shall be kept and maintained by the Discharger and be available at all times to operating personnel.
2. Project description;
3. WDID;
4. Site address and driving directions;
5. Emergency contact person and 24-hour phone number.
6. Potential construction site pollutants of concern and sources

## **H. MAPPING REQUIREMENTS**

The SWPPP shall include the following maps:

- 1. Project Location Map:** A topographic map extending one-quarter mile beyond the property boundaries of the construction site, clearly showing: the construction site perimeter and surface water boundaries (including drainage channels, springs, SEZs, 100-year floodplain areas, and wetlands), and the designated discharge locations where the effluent will be controlled and monitored. The requirements of this paragraph may be included in the site map required under the following paragraph if appropriate.
- 2. Map(s) of a scale no smaller than 1 inch equals 50 feet (1:600), showing:**
  - a.** The project's construction limit boundaries;
  - b.** Areas used to store construction materials, equipment, stockpiles, spoils and wastes, including concrete mixing and washout areas;
  - c.** Vehicle and equipment access, fueling, cleaning, storage and service areas;
  - d.** Existing and planned paved areas and buildings;
  - e.** Areas of existing vegetation to be preserved;
  - f.** Surface water locations, including SEZ boundaries mapped according to the criteria in the Lahontan Basin Plan, section 5.7; 100-year floodplain boundaries; ephemeral and intermittent waterways, springs, and wetlands;
  - g.** BMPs: Specific locations of storm water structures and controls used during construction as required by section VIII.C.3 of this Permit. Each control structure shall be represented by a standard symbol as indicated in the site map legend;
  - h.** Existing or pre-construction storm water structures and controls to reduce sediment and other pollutants in storm water discharge;
  - i.** DSAs: All active DSAs shall be delineated on a map as the project progresses. DSA maps must be kept updated to reflect site conditions. Once an area is stabilized or winterized, it should be hatched out or otherwise notated to indicate it is no longer disturbed;
  - j.** Drainage patterns and slopes anticipated after major grading activities;
  - k.** Post-construction storm water structures and controls;
  - l.** The locations designated for storm water discharge sampling. See Attachment C for additional detail regarding sampling requirements.
- 3. Information shown on all maps must be legible (i.e., avoid showing too much information on one map). All maps must include a north arrow, scale (either**

bar or text format), and a legend with symbols legible in black and white print for all required information. Standard symbols for pollution control structures must be included in the legend of applicable maps.

#### **I. CONSTRUCTION AND BMP IMPLEMENTATION SCHEDULE**

The SWPPP shall include:

1. The anticipated start and end dates of construction and well as phases of significant grading activities and work in or near drainages or receiving waters.
2. The schedule for deployment of BMPs. BMPs must be implemented, modified, and maintained appropriately for the site and weather conditions encountered during the project.

#### **J. SITE MANAGEMENT**

The SWPPP shall include:

1. A description of the measures, controls and practices to meet the requirements of section VIII of this Permit.
2. The location of site management controls shown on a map as described in the Mapping Requirements of this section, if applicable.
3. Standard specifications (including engineered drawings if applicable) for construction and installation of such controls.

#### **K. SEDIMENT AND EROSION/STABILIZATION CONTROLS**

The SWPPP shall include:

1. A description of measures, controls and practices to meet the requirements of section VIII of this General Permit.
2. The location of all sediment and erosion/stabilization controls shown on a map as described the Mapping Requirements of this section.
3. Standard specifications (including engineered drawings if applicable) for construction and installation of such controls.

## **L. NON-STORM WATER MANAGEMENT**

The SWPPP shall include:

1. A description of measures, controls and practices to meet the requirements of section VIII of this General Permit.
2. The location of all non-storm water management controls shown on a map as described in the Mapping Requirements of this section.
3. Standard specifications (including engineered drawings if applicable) for construction and installation of such controls.

## **M. DEWATERING AND DIVERSIONS**

The SWPPP shall include a Dewatering or Diversion Plan to meet the requirements of section VIII of this Permit if the Discharger will utilize surface water diversions to bypass natural stream flows, or pumps or siphons for removal or ground water from excavations (dewatering) during construction. A Diversion and/or Dewatering Plan, as required, shall be developed as an attachment to the SWPPP.

## **N. ACTIVE TREATMENT SYSTEM (ATS) PLAN**

If an ATS is used, the discharger shall develop an ATS Plan in compliance with Attachment E of this Permit. The ATS Plan shall be included in the SWPPP.

## **O. POST-CONSTRUCTION STORM WATER MANAGEMENT**

The SWPPP shall include:

1. A description of post-construction storm water management structures and controls to meet the requirements of section VIII of this General Permit.
2. The location of all post-construction storm water controls shown on a map as described in the Mapping Requirements of this section.
3. Standard specifications (including engineered drawings if applicable) for construction and installation of such controls.
4. The operations and maintenance requirements needed to maintain the effectiveness of storm water controls and the responsible party for ensuring that appropriate maintenance is completed.

**P. RAIN EVENT ACTION PLAN (REAP)**

The SWPPP shall include records of National Weather Service forecasts and a REAP prior to predicted storm events to meet the requirements of section VIII of this General Permit. A REAP template is included in Attachment H.

**Q. CONSTRUCTION SITE MONITORING AND REPORTING PLAN (CSMRP)**

The SWPPP shall include a CSMRP to meet the requirements of Attachment C.

**R. BMP MAINTENANCE AND REPAIR**

The SWPPP shall include procedures for conducting maintenance or repair of failed or inadequate BMPs within 72 hours of identification, or before the next predicted rain event, whichever is sooner.

**S. OTHER PLANS**

This SWPPP may incorporate, by reference, the appropriate elements of other plans required by local, state or Federal agencies. A copy of any requirements incorporated by reference shall be kept at the construction site.

**X. COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

**A. Compliance with Effluent Limitations**

Dischargers must identify all runoff control points where effluent may be discharged off the project boundaries. Monitoring for compliance with effluent limitations is not required if there is no discharge off the project boundaries (e.g., all precipitation is infiltrated on the project site). Compliance with the NELs in section IV of this General Permit is required for any discharge at designated runoff control points that is generated by non-storm water discharges or storm events that do not exceed the rainfall associated with a 20-year, 1-hour storm, which, for purposes of this General Permit, is equal to an intensity of 1 inch of rainfall in a 1-hour period (compliance storm event).

If constituent concentrations of waters entering the project area (run-on) exceed the numerical limitations specified above, there must be no increase in the constituent concentrations in the waters that are discharged from the project area.

Discharge monitoring results shall not be used by Water Board staff for determining compliance with NELs for storms with intensities in excess of the compliance storm event or where run-on exceeds the NELs and the discharge does not increase the level of the exceedance. The Discharger is required to provide supporting documentation such as run-on monitoring data, on-site rain gauge data, and/or rainfall data provided by the National Oceanic and Atmospheric Administration (NOAA) to the Lahontan Water Board for any claims that an effluent limit excursion or exceedance occurred due to these circumstances. The supporting information shall clearly show when the sample was collected relative to the occurrence of the compliance storm event (i.e., the time of rainfall relative to the time of sample collection must be documented). The information will be evaluated for the merits of any claim for relief from compliance requirements for the NELs.

Additionally, dischargers must provide documentation for any claim that effluent leaving the project boundaries does not reach receiving waters or MS4s for relief from the NELs for discharges to surface waters.

## **B. Multiple Sample Data**

The NELs in this General Permit are evaluated as a maximum daily effluent limitation (MDEL). Pursuant to NPDES regulations (40CFR Part 122.2), *maximum daily discharge* limitation means the highest allowable “daily discharge.” *Daily* discharge means the “discharge or a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of measurement other than mass, the daily discharge is calculated as the average measurement of the pollutant over the day. For purposes of this General Permit, the daily average effluent value is defined as the arithmetic mean of the daily effluent data. When determining compliance when more than one sample result is available due to collection at multiple discharge points and/or multiple times during the calendar day, the Discharger shall compute the arithmetic mean concentration for each day of discharge.

Samples must be representative of the volume and quality of runoff from the site. Sample collection must not be manipulated in such a way as to skew the average daily effluent value. However, the discharger must provide monitoring data to indicate estimates of the proportional area or flow that each discharge point from the site represents when reporting the data.

**C. Maximum Daily Effluent Limitation (MDEL)**

If the average daily concentration exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period.

**D. Sampling by Other Parties**

Sampling may be conducted by persons other than the Discharger. Water Board staff, operators of municipal separate storm sewer systems, or others may analyze storm samples. Samples collected by others may be used with other data to determine MDELs and to conduct compliance determinations, as provided above.



## **ATTACHMENT A – ACRONYM LIST**

ATS - Active Treatment System  
BAT - Best Available Technology Economically Achievable  
BCT - Best Conventional Pollutant Control Technology  
BMPs - Best Management Practices  
BPT - Best Practicable Technology Economically Achievable  
CASQA – California Storm Water Quality Association  
CCR - California Code of Regulations  
CEQA - California Environmental Quality Act  
CFR – Code of Federal Regulations  
CPESC - Certified Professional in Erosion and Sediment Control  
CPSWQ - Certified Professional in Storm Water Quality  
CSMRP - Construction Site Monitoring and Reporting Plan  
COC – Chain of Custody  
CWA - Clean Water Act  
CWC - California Water Code  
DNQ - Detected, but Not Quantified  
DSA - Disturbed Soil Areas  
ELG – Effluent Limitation Guideline  
LID – Low Impact Development  
LRP – Legally Responsible Person  
LUP – Linear Underground/Overhead Project  
MATC – Maximum Allowable Threshold Concentration  
MCL - Maximum Contaminant Level  
MDEL - Maximum Daily Effluent Limitation  
MDL – Method Detection Limit  
ML - Minimum Level  
MRP – Monitoring and Reporting Program  
MS4 – Municipal Separate Storm Sewer System  
NAL – Numeric Action Level  
ND - Not Detected  
NEL – Numeric Effluent Limitation  
NICET - National Institute for Certification in Engineering Technologies  
NOA – Notice of Applicability  
NOAA – National Oceanic and Atmospheric Administration  
NOT – Notice of Termination  
NOI - Notice of Intent  
NPDES – National Pollutant Discharge Elimination System  
NSPS - New Source Performance Standards  
NTU – Nephelometric Turbidity Units  
NWS – National Weather Service  
PRD - Permit Registration Document  
QSD - Qualified SWPPP Developer  
QSP - Qualified SWPPP Practitioner  
REAP - Rain Event Action Plan

RL – Reporting Limit  
RUSLE - Revised Universal Soil Loss Equation  
SEZ - Stream Environment Zone  
SMARTS - Storm water Multi-Application and Report Tracking System  
SWAMP – Surface Water Ambient Monitoring Program  
SWPPP - Storm Water Pollution Prevention Plan  
USEPA – United States Environmental Protection Agency  
WDID - Waste Discharger Identification  
WDRs - Waste Discharge Requirements  
WQBEL - Water Quality-Based Effluent Limitations  
WQO – Water Quality Objective

## **ATTACHMENT B – GLOSSARY**

### **Active Treatment System (ATS)**

A treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation to aid in the reduction of turbidity caused by fine suspended sediment.

### **Acute Aquatic Toxicity Test**

A test to measure the relative severity of chemical toxicity on aquatic life. For aquatic toxicity, an effect observed within 96 hours or less is considered acute.

### **Anticipated Storm Event**

An anticipated storm event is any weather pattern that is forecast to have a 30% or greater chance of producing precipitation in the project area, as determined by the precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at <http://www.srh.noaa.gov/forecast>).

### **Approved Signatory**

A person who has been authorized by the Legally Responsible Person to sign, certify, and electronically submit Permit Registration Documents, Notices of Termination, and any other documents, reports, or information required by the General Permit, the State or Regional Water Board, or USEPA. The Approved Signatory must be one of the following:

1. For a corporation or limited liability company: a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation or limited liability company; or (b) the manager of the facility if authority to sign documents has been assigned or delegated to the manager of the facility if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
3. For a municipality, State, Federal, or other public agency: a principal executive officer, ranking elected official, city manager, council president, or any other authorized public employee with managerial responsibility over the construction or land disturbance project (including, but not limited to, project manager, project superintendent, or resident engineer);
4. For the military: any military officer or Department of Defense civilian, acting in an equivalent capacity to a military officer, who has been designated;

5. For a public university: an authorized university official;
6. For an individual: the individual, because the individual acts as both the Legally Responsible Person and the Approved Signatory; or
7. For any type of entity not listed above (e.g. trusts, estates, receivers): an authorized person with managerial authority over the construction or land disturbance project.

### **Arithmetic Mean ( $\mu$ )**

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \mu = \Sigma x / n \quad \text{where: } \Sigma x \text{ is the sum of the measured ambient water concentrations, and } n \text{ is the number of samples.}$$

### **Beneficial Uses**

California Water Code defines beneficial uses as those uses of the waters of the state that must be protected against quality degradation as specified in the Basin Plan.

### **Best Available Technology Economically Achievable (BAT)**

As defined by USEPA, BAT is a technology-based standard established by the Clean Water Act as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. The BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

### **Best Conventional Pollutant Control Technology (BCT)**

As defined by USEPA, BCT is a technology-based standard for the discharge from existing industrial point sources of conventional pollutants including biochemical oxygen demand (BOD), total suspended sediment (TSS), fecal coliform, pH, and oil and grease.

### **Best Management Practices (BMPs)**

Stormwater control measures including schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States.

### **Chain of Custody (COC)**

The form used to track sample handling as samples progress from sample collection through the analysis and reporting process in the laboratory. COC forms can be obtained from an analytical laboratory upon request.

**Coagulation**

The clumping of particles in a discharge to settle out impurities, often induced by chemicals such as lime, alum, and iron salts.

**Common Plan of Development**

Generally a contiguous area where multiple, distinct construction activities may be taking place at different times under one plan. A plan is generally defined as any piece of documentation or physical demarcation that indicates that construction activities may occur on a common plot. Such documentation could consist of a tract map, parcel map, demolition plans, grading plans or contract documents. Broad planning documents such as land use master plans, conceptual master plans, or broad-based CEQA or NEPA documents that identify potential projects for an agency or facility are not considered common plans of development.

**Compliance Storm Event**

The 20-year, 1-hour storm, which is equal to 1 inch of rainfall during a 1-hour period. For ATSS, the compliance storm event is the 10-year, 24-hour storm event as determined by the following precipitation frequency maps (expressed in tenths of inches): <http://www.wrcc.dri.edu/pcpnfreq/nca10y24.gif>.

**Daily Average Discharge**

The discharge of a pollutant measured during any 24-hour period that reasonably represents a calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily average discharge is calculated as the total mass of the pollutant discharged during the day. For pollutants with limitations expressed in other units such as concentration, the daily average discharge is calculated as the average measurement of the pollutant throughout the day. The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day from outfalls identified for the project site.

**Detected, but Not Quantified (DNQ)**

DNQ are those sample results less than the Reporting Limit (RL), but greater than or equal to the laboratory's Method Detection Limit (MDL).

**Diversions**

Activities taken to route flowing water or groundwater around or away from a work site that does not cause a measurable change in water quality upstream or downstream of the work area.

**Dewatering**

Activities taken to remove excess water in an excavation or impoundment by pumping or other mechanical means. Dewatering fluids generally contain pollutants such as sediment.

**Direct Discharge**

The addition of any pollutant to waters of the U.S. from any point source including surface runoff that is collected or channeled by human activity; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person that do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances leading into a privately owned treatment works.

**Discharger**

The Legally Responsible Person or entity subject to this General Permit.

**Effluent**

Any discharge of water by a discharger either to the receiving water or beyond the property boundary controlled by the discharger.

**Effluent Limitation**

Any numeric or narrative restriction imposed on quantities, discharge rates, or concentrations of pollutants that are discharged beyond a project boundary from point sources into waters of the U.S., the waters of the contiguous zone, or the ocean.

**Effluent Limitation Guideline (ELG)**

ELGs are U.S. national standards for wastewater discharges to surface waters and publicly owned treatment works. The USEPA issues ELGs for categories of industrial sources of water pollution under the Clean Water Act.

**Emergency**

A sudden, unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, essential public services, or the environment.

**Estimated Chemical Concentration**

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Index Period**

The period of time during which bioassessment samples must be collected to produce results suitable for assessing the biological integrity of streams and rivers. Instream communities naturally vary throughout the seasons and sampling during the index period ensures that samples are collected during a period when communities are stable such that year to year consistency is obtained. The index period for the Lake Tahoe Hydrologic Unit is July 1 through August 15.

**Legally Responsible Person**

The Legally Responsible Person (LRP) will typically be the project proponent. The categories of persons or entities that are eligible to serve as the LRP are set forth below. For any construction or land disturbance project where multiple persons or entities are eligible to serve as the LRP, those persons or entities shall select a single LRP. In exceptional circumstances, a person or entity that qualifies as the LRP may

provide written authorization to another person or entity to serve as the LRP. In such a circumstance, the person or entity that provides the authorization retains all responsibility for compliance with the General Permit. Except as provided in category 2(d), a contractor who does not satisfy the requirements of any of the categories below is not qualified to be an LRP.

The following persons or entities may serve as an LRP:

1. A person, company, agency, or other entity that possesses a real property interest (including, but not limited to, fee simple ownership, easement, leasehold, or other rights of way) in the land upon which the construction or land disturbance activities will occur for the regulated site.
2. In addition to the above, the following persons or entities may also serve as an LRP:
  - a. For linear underground/overhead projects (LUPs), the utility company, municipality, or other public or private agency that owns or operates the LUP;
  - b. For land controlled by an estate or similar entity, the person who has day-to-day control over the land (including, but not limited to, a bankruptcy trustee, receiver, or conservator);
  - c. For pollution investigation and remediation projects, any potentially responsible party that has received permission to conduct the project from the holder of a real property interest in the land; or
  - d. For U.S. Army Corp of Engineers projects, the U.S. Army Corps of Engineers may provide written authorization to its bonded contractor to serve as the LRP, provided, however, that the U.S. Army Corps of Engineers is also responsible for compliance with the general permit, as authorized by the Clean Water Act or the Federal Facilities Compliance Act.

#### **Maximum Allowable Threshold Concentration (MATC)**

For ATS use, the allowable concentration of residual, or dissolved coagulant/flocculant in effluent. The MATC shall be specific to the coagulant/flocculant used, and be based on toxicity testing conducted by an independent, third-party laboratory.

**Maximum Daily Effluent Limitation (MDEL)**

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

**Median**

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

**Method Detection Limit (MDL)**

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

**Minimum Level (ML)**

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

**Municipal Storm Water Collection System**

A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) which is:

1. owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created pursuant to applicable federal and bi-state laws) having jurisdiction, that discharges to waters of the United States; including special districts under State law such as a sewer district or drainage district, flood control district, Indian tribe or an authorized Indian tribal organization or a designated and approved management agency under Section 208 of the CWA;
2. designed or used for collecting or conveying storm water;
3. which is not a combined sewer; and
4. which is not part of a Publicly Owned Treatment Works as defined in 40 CFR 122.2.



**New Source Performance Standards**

New Source Performance Standards (NSPS) are pollution control standards issued by the USEPA. NSPS under the CWA set the level of allowable wastewater discharges from new industrial facilities.

**Non-Storm Water**

Any wastewater that is not composed entirely of storm water, as defined below.

**Non-Visible Pollutants**

Pollutants that cannot be visually observed and are associated with a specific site, material, or activity that can cause a negative impact on water quality. Examples include chlorine, fertilizers, and pesticides/herbicides.

**Not Detected (ND)**

Sample results which are less than the laboratory's MDL.

**Post-Construction BMPs**

Structural and non-structural controls that detain, retain, or reduce the discharge of wastewater and pollutants to receiving waters after final stabilization is attained.

**Qualified SWPPP Developer (QSD)**

Individual who is authorized to develop and revise SWPPPs.

**Qualified SWPPP Practitioner (QSP)**

Individual assigned responsibility for non-storm water and storm water visual observations, sampling and analysis, and responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP and CSMRP.

**Rain Event Action Plan (REAP)**

A written document specific to each storm event, that when implemented, is designed to protect all exposed portions of the site within 24 hours of any likely precipitation.

**Reporting Level (RL)**

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Lahontan Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

**Revised Universal Soil Loss Equation (RUSLE)**

Empirical model developed by the USDA that calculates average annual soil loss as a function of rainfall and runoff erosivity, soil erodibility, topography, erosion controls, and sediment controls.

**Routine Maintenance**

Activities intended to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

**Run-on**

Waters that originate offsite and flow onto the project site.

**Storm Water Multi-Application and Report Tracking System (SMARTS)**

The State Water Board's electronic system to manage administrative aspects of this General Permit, including obtaining and terminating coverage, and submitting required data and reports.

**Storm Water**

Storm water runoff, snow melt runoff, and surface runoff and drainage. It excludes infiltration and runoff from agricultural land.

**Structural Controls**

Any physical facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution.

**Wadeable Stream**

A stream that can be crossed safely by wading during an index period.

**Water of the United States**

Generally refers to surface waters, as defined by the USEPA in 40 CFR 122.2.

**Water Quality Objectives (WQOs)**

Water quality objectives are defined in the California Water Code as limits or levels of water quality constituents or characteristics that are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

## **ATTACHMENT C – CONSTRUCTION SITE MONITORING AND REPORTING PROGRAM (CSMRP)**

Title 40 of the Code of Federal Regulations at section 122.48 (40 CFR 122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Lahontan Water Board to require technical and monitoring reports. This CSMRP establishes minimum monitoring and reporting requirements for this General Permit, which implement the federal and California regulations. Additional monitoring may be required as specified by the Executive Officer.

### **I. GENERAL MONITORING PROVISIONS**

- A.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall be identified in the CSMRP filed as part of the SWPPP with the NOI. Discharge locations may be updated as necessary if certain phases or project segments are completed and permanently stabilized. The updated sampling locations must be maintained in the SWPPP and made available to Lahontan Water Board staff upon request.
- B.** With the exception of field analysis conducted by dischargers for turbidity and pH, all laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports. Dischargers may conduct their own field analysis of turbidity and pH if the discharger has sufficient capability (qualified trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.
- C.** All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- D.** Dischargers shall ensure that all sampling and sample preservation are in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Associate).
- E.** All sample analyses shall be conducted according to test procedures specified in 40 CFR Part 136, or otherwise stated within this Monitoring and Reporting Program.

- F.** Monitoring results, including non-compliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.
- G.** All inspection, maintenance repair and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate any or all these activities to an employee appropriately trained to do the task(s).
- H.** Dischargers are not required to conduct visual inspections or physically collect samples outside of daylight hours, or when conditions exist that would be dangerous to personnel. Winter period (October 16 through April 30) monitoring requirements are also waived if significant environmental impacts would result from road system use to access the activity area, or if worker safety would be compromised. An explanation of the missed monitoring requirements due to these exceptions shall be recorded in writing and provided to Lahontan Water Board with the Annual Report.

## **II. CONSTRUCTION SITE MONITORING AND REPORTING PLAN REQUIREMENTS**

- A.** Pursuant to Water Code Sections 13383 and 13267, all dischargers subject to this General Permit shall develop and implement a written site-specific Construction Site Monitoring and Reporting Plan (CSMRP) in accordance with the requirements of this Section. The CSMRP shall be developed prior to the commencement of construction activities, and revised as necessary to reflect project revisions. The CSMRP shall be part of the Storm Water Pollution Prevention Plan (SWPPP).
- B.** Dischargers electing to operate an Active Treatment System (ATS) shall develop and implement a supplemental monitoring program for these systems in accordance with the requirements established in Attachment E of this General Permit.
- C.** The CSMRP shall be developed and implemented to include the monitoring and reporting requirements specified in this CSMRP and shall at a minimum address the following objectives:
  - 1.** Demonstrate that the site is in compliance with the discharge prohibitions and applicable effluent limitations.
  - 2.** Determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives.

3. Determine whether immediate corrective actions, additional BMPs, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges.
4. Determine whether BMPs included in the SWPPP/REAP are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.
5. Demonstrate that appropriate sample collection, handling, and analyses procedures are implemented.

### **III. VISUAL INSPECTIONS**

#### **A. Visual Inspections**

1. During the active construction season (defined as May 1 through October 15 for purposes of this General Permit), an inspection of the construction site shall be made at the end of each work day. Dischargers working (under an approved variance) during the period from October 16 through April 30 of the following year shall also conduct inspections on a daily basis. During the Winter or inactive period (defined as October 16 through April 30 for purposes of this permit), Dischargers must conduct inspections at least once per month during daylight hours.
2. During both active and inactive periods, a construction site inspection shall also be performed within 24 hours prior to an anticipated precipitation event (chance of precipitation is forecasted at 30 percent or greater), daily during extended storm events, and within 24 hours after actual storm events. This requirement does not apply during snow events. If the discharger cannot complete an inspection within the specified time frames, the reason for the delay shall be recorded in writing and maintained with the next inspection report.
3. Inspections shall be performed periodically, in accordance with this General Permit, from the commencement of construction activities until termination of coverage under this General Permit. The purpose of the inspections is to discover potential water quality problems at the construction site so the Discharger can implement corrective measures immediately. The inspections will also be used to document compliance with the conditions of the General Permit and the SWPPP and to evaluate the effectiveness of the SWPPP and the REAP.
4. Inspection procedures shall be specified in the CSMRP. Observations at all designated effluent outfalls and other locations where storm water may discharge from the project boundaries to surface waters or municipal storm sewer systems must be included in the specified

procedures. Inspections shall be conducted to identify and report the compliance status for following items, as a minimum:

- a.** Damage to containment dikes or erosion control fencing.
  - b.** Improperly installed or ineffective erosion control fencing.
  - c.** Unauthorized vehicle access, or vehicle access into designated non-construction areas not subject to disturbance.
  - d.** Boundary fence damage or removal.
  - e.** Disturbed areas with inadequate erosion prevention and sediment control protection.
  - f.** Evidence of any sediment leakage through erosion control fencing or containment dikes.
  - g.** Soil piles and other earthen materials which are unprotected or located in a drainage way.
  - h.** Spilled and improperly stored chemicals, paint, fuel, oil, solvents, sealants, etc.
  - i.** Upstream runoff diversion structures (are in place and operational).
  - j.** Any evidence of sediment tracking from construction equipment.
  - k.** Any signs of soil erosion or deposition down gradient from runoff discharges.
  - l.** Sediment accumulation within onsite storm water drainage control facilities, and facilities in need of maintenance to ensure effectiveness.
  - m.** Any evidence of non-storm water discharges from the project site. The inspection report shall note whether any such discharges are authorized, or are illicit and not authorized. If authorized, the condition of the applicable BMPs must be indicated.
  - n.** Any observed impacts to the receiving water.
- 5.** All inspections shall be recorded and maintained on a construction site inspection form provided as part of the CSMRP. Inspection forms shall be maintained and made available to the Lahontan Water Board, State Water Board, or USEPA staff, or designated representative, upon request. At a minimum the following information shall be recorded:

- a. Weather conditions at the time of the inspection, including presence or absence of precipitation, estimated time of beginning of storm event, duration of storm event, time elapsed since last storm event, and approximate amount of rainfall in inches.
- b. Site information, including stage of construction, activities completed, and approximate area of the site exposed to storm water runoff.
- c. A description of BMPs evaluated (i.e., erosion controls, sediment controls, chemical and waste controls, and non-storm water controls) including the locations and any deficiencies noted.
- d. Observations of any storm water containment areas to detect leaks and ensure maintenance of adequate freeboard.
- e. A description of any non-storm water discharges and spills/leaks observed.
- f. Observations at all relevant discharge points and downstream locations in the receiving water, including the presence or absence of floating and suspended materials, sheens, discolorations, turbidity, and odors.
- g. Any corrective actions required, including any necessary changes to the SWPPP or REAP and the associated implementation dates.
- h. Photographs taken during the inspection, if any.
- i. Inspector's name, title, and signature.
- j. A space shall be provided to record follow up corrective actions that have been completed in response to the inspection report. A summary of the completed corrective actions shall be recorded in this space with the date of completion.

#### **IV. STORM WATER MONITORING**

##### **A. Discharge Monitoring Locations**

1. The Discharger shall perform sampling and analysis of storm water and non-storm water discharges to characterize discharges associated with construction activity from the entire project disturbed area.
2. Effluent samples shall be collected, at a minimum, at all designated discharge points where storm water and authorized non-storm water is discharged offsite.

3. Dischargers shall ensure that effluent samples are representative of the discharge in each drainage area based on visual observation of the water and upstream conditions.
4. Dischargers shall monitor and report site run-on from surrounding areas if there is a reason to believe run-on may contribute to an effluent limit exceedance. Run-on sampling locations shall be identified in the CSMRP if applicable.
5. Dischargers who deploy an ATS on their site, or a portion of their site, shall collect ATS effluent samples and measurements from the discharge pipe or another location representative of the nature of the discharge.
6. Discharge point monitoring locations shall be identified in the CSMRP and updated if disturbed soil areas change during the course of the project.

#### **B. Receiving Water Monitoring Locations**

When receiving water monitoring is determined to apply to the project (see subsection C.3. below), the following shall apply:

1. **Upstream/up-gradient.** Dischargers shall obtain upstream/up-gradient receiving water samples from a representative and accessible location as close as possible to and upstream from the effluent discharge.
2. **Downstream/down-gradient.** Dischargers shall obtain downstream/down-gradient receiving water samples from a representative and accessible location as close as possible to and downstream from the effluent discharge.
3. Receiving water monitoring locations shall be identified in the CSMRP.

#### **C. Sampling Requirements**

##### **1. Storm Water Effluent Discharges.**

- a. During the active construction season (defined as May 1 through October 15 for purposes of this General Permit), Dischargers shall collect one grab sample from each discharge point where storm water is discharged off the project boundaries and/or to surface waters. A minimum of three samples must be collected for each day that storm water is discharged offsite. If fewer than three discharge points are present at the site, at least three samples shall be collected from the discharge location(s). Dischargers working under an approved variance during the period from October 16



through April 30 of the following year shall collect samples in accordance with the protocols described above.

- b. During the period from October 16 through April 30 of the following year, Dischargers must collect a representative sample from each designated discharge sampling point during a minimum of two storm events that produce a discharge off the project boundaries. Sampling is only required for one day during each storm event. A minimum of three samples for each day sampling is conducted is required.
  - c. Samples shall be analyzed onsite for turbidity using portable field instruments calibrated in accordance with manufacturer specifications. If there is a visible oily sheen at any discharge point, a sample shall be collected and analyzed for grease and oil. Samples shall be collected and analyzed, consistent with Table C 1.
2. **Non-visible Pollutants in Effluent.** The Discharger shall identify in the CSMRP potential non-visible pollutants that may contaminate storm water or non-storm water discharged from the project site (i.e., acids and bases, solvents, lubricants, fertilizers; pollutants known to have been spilled and have contaminated the soil; concrete or soil amendments, such as gypsum, that may result in increase pH). If a breach, malfunction, leakage, or spill is identified that has the potential to result in the discharge of a non-visible pollutant, or the discharge of the non-visible pollutants is expected, the discharger shall perform sampling for the specific non-visible pollutants at the discharge points corresponding to the applicable drainage area. This includes sampling for pH using a portable field meter when runoff has come into contact with uncured concrete or other materials that could affect the pH of effluent. The discharger shall also collect and analyze a sample of storm water runoff that has not come into contact with the pollutants of concern for comparison with the non-visible pollutant discharge sample.

Analyses may include, but are not limited to, indicator parameters such as volatile organic compounds, semi-volatile organic compounds, metals, salts and nutrients such as nitrogen and phosphorus, and other analyses as appropriate. The CSMRP shall specify appropriate indicator parameters for each non-visible pollutant identified, as well as appropriate analytical methods, detection limits, sampling procedures, and sampling preservation. When possible, these methods should be consistent with 40 CFR Part 136 to the maximum extent possible.

For protection of receiving waters the pH of effluent samples should not fall outside of the range of 6.0 to 9.0. This range is set as a

numeric action level (NAL). If the pH of effluent is outside of the NAL, the discharger must investigate the cause of the excursion and implement appropriate corrective measures. If the pH levels are determined to be from natural causes, the discharger must provide data (e.g., from run-on) to demonstrate this condition.

- 3. Receiving Waters.** For certain sites and situations, such as stream restoration projects or other projects conducted within or adjacent to surface waters, discrete discharge points and effluent outfalls may not exist. In these cases receiving water sampling is more appropriate to evaluate potential impacts to water quality. For these sites, during the period from May 1 through October 15 of each year, the discharger shall collect a minimum of three samples per day for each day that storm water or authorized non-storm water is discharged to receiving waters at both upstream locations above the project effects and downstream locations below the project area. Dischargers working under an approved variance during the period of October 16 through April 30 the following year shall collect samples in accordance with the protocols described above. Samples shall be analyzed in accordance with Table C-1.
- 4. Bioassessments.** Dischargers operating on sites that disturb 30 acres or more of the landscape and have a direct discharge to a wadeable stream or streams shall conduct or participate in benthic macroinvertebrate bioassessment prior to commencement of construction activity, as specified in Attachment C-1.

**Table C-1. Monitoring Requirements (May 1 through October 15)\***

| Parameter              | Units | Test Method                           | Minimum Detection Limit | Frequency |
|------------------------|-------|---------------------------------------|-------------------------|-----------|
| Turbidity              | NTU   | 1                                     | 1 NTU                   | 2         |
| pH                     | SU    | 1                                     | 0.2 pH                  | 4         |
| Grease and Oil         | mg/L  | EPA 1664 w/silica gel treatment (SGT) | 2 mg/L                  | 3         |
| Non-visible Pollutants |       | 4                                     | 4                       | 4         |
| Bioassessment          | NA    | 5                                     | NA                      | 6         |

**Notes:**

- 1 - Shall be field tested with a calibrated portable instrument.
- 2 - **Effluent**-Minimum of three samples per day storm water is discharged - All designated loctions must be sampled.  
**Receiving waters** – When discharge sampling is determined to be inappropriate, collect three samples per day at designated sampling locations for each day that storm water is discharged to receiving waters.
- 3 - **Effluent** - When visible sheen is observed at discharge point.
- 4 - The units, test method, and minimum detection limit shall be identified in the discharger's CSMRP for each non-visible pollutant identified by the discharger. Analytical methods shall be in accordance with 40 CFR Part 136. Monitoring for non-visible pollutants shall be conducted as specified in section IV.C.2 of this MRP (when suspected in the discharge or when the potential to discharge has been determined).
- 5 - The current SAFIT STEs (November 28, 2006) list requirements for both the Level I and Level II taxonomic effort, and area located at [http://www.swrcb.ca.gov/swamp/docs/safit/ste\\_list.pdf](http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf). When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board's SWAMP website.
- 6 - Applicable only to dischargers with a total project-related ground disturbance of 30 acres or more and a direct discharge to a receiving water. See Attachment C-1.

\*Note - see section C of this attachment for requirements during inactive construction period

## **V. GENERAL REPORTING REQUIREMENTS**

- A.** All data and reports must be submitted through the SMARTS and be certified by the LRP or an approved signatory.
- B.** All turbidity and pH analytical results collected from field instruments must be reported within five days after storm event conclusion. All other results determined by an analytical laboratory must be submitted within five days of receipt of the results from the laboratory.
- C.** The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.
- D.** The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
  - 1.** Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
  - 2.** Sample results less than the reporting limit (RL), but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
  - 3.** For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- E.** Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

## **VI. TWENTY FOUR-HOUR REPORTING**

The Discharger shall immediately notify the Lahontan Water Board orally within 24 hours whenever an adverse condition occurs as a result of a discharge. An adverse condition includes, but is not limited to, a violation or

threatened violation of the conditions of this General Permit, significant spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance pursuant to Section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Lahontan Water Board within five (5) business days of occurrence. The written notification shall identify the adverse conditions, describe the actions necessary to remedy the condition and/or the actions implemented to abate the problem from continuing, and specify a timetable, subject to the modifications of the Lahontan Water Board, for remedial actions.

In the event that sampling results exceed any applicable NEL, the dischargers shall orally notify the Lahontan Water Board within 24 hours after the NEL exceedance has been identified and electronically submit all storm event sampling results through the SMARTS within five (5) business

days after the NEL exceedance has been identified.

## **VII. ANNUAL REPORT**

On or before **November 30** of each year, the discharger shall prepare and electronically submit through the SMARTS an Annual Report for the period of October 16 of the previous year through October 15 of the current year. The SMARTS reporting module requests the following information:

- A.** The project name and location.
- B.** Any significant problem(s) which occurred during project construction and remedial measures planned or implemented.
- C.** A summary and evaluation of all sampling and analysis results, including copies of laboratory reports and rain gauge measurements, from monitoring activities conducted pursuant to section IV of this CSMRP.
- D.** A certified statement indicating whether or not the site has been winterized in accordance with BMPs for erosion prevention and sediment control.
- E.** Documentation of required QSP certifications and personnel training. Personnel training records shall be maintained on site and include, at a minimum, signed attendance sheets and agendas from pre-construction meetings covering SWPPP requirements. Additional information or training may be recorded as appropriate. The intent of this requirement is to ensure that all construction personnel are educated on their responsibilities for controlling pollutants in storm water discharges.
- F.** A certified statement indicating whether or not the project site is in compliance with the conditions of the general permit and the SWPPP. This certification shall be signed by a Qualified SWPPP Practitioner

(QSP). This certification should be based upon site inspections required in section III of this CSMRP.

## **VIII. FINAL REPORT**

Following completion of project construction, the Discharger shall prepare and electronically submit through the SMARTS a final report containing the information required under the Annual Report as well as the following information:

- A.** Details of any modification of the construction plans for the proposed storm water collection treatment, or disposal facilities or restoration work.
- B.** Details on any change in the amount of impervious coverage for the project site.
- C.** Records of all inspections (including the inspection log book), compliance certificates, monitoring reports, and noncompliance reporting must be maintained by the project proponent for a period of at least three years.
- D.** The final monitoring report shall be certified by the LRP, or the approved signatory of the LRP, and submitted within 30 days of project completion.

## **IX. MONITORING AND REPORTING REQUIREMENTS FOR RESTORATION PROJECTS**

Because restoration projects are often executed to improve existing water quality conditions, it is necessary to monitor restoration project effectiveness. Monitoring information can also identify project and/or construction method strengths and weaknesses. This knowledge can feedback into the maintenance of the existing system and also be applied to future water quality improvement projects.

To monitor the success of the restoration of a disturbed area, the project proponent shall submit a detailed Restoration Monitoring Plan as part of the CSMRP with annual performance criteria for the review and approval of the Lahontan Water Board staff. The Restoration Monitoring Plan shall include a contingency plan for actions to be taken if performance criteria are not met.

Ideally, pre- and post-construction monitoring is required to best evaluate the success of the restoration project. Monitoring should include, but not be limited to, assessments of vegetative cover and water quality and quantity measurements. Where appropriate, monitoring should also include upgradient and downgradient sampling of water entering a pretreatment system (sediment can, sand and oil trap).

Recommendations for a Restoration Monitoring Plan include the following:

- A.** Pre- and Post-project surveys of vegetative cover at a representative scale for the site, including an inventory of species diversity and an assessment of the restored soil's ability to infiltrate runoff;
- B.** Pre- and Post project cross-sectional surveys of stream channel dimensions and elevations (if applicable);
- C.** Post-project monitoring of the planting survival;
- D.** Photo survey including photo-point locations of the disturbed/restored area.
- E.** Pre- and post-project groundwater level measurements from at least two piezometers installed for observing groundwater levels;
- F.** Site assessments of the success of the implemented erosion and sediment control measures;
- G.** Water quality analyses to include Total N, Total P, Conductivity, and Turbidity at a minimum, in addition to other required sampling under this General Permit.

## **ATTACHMENT C-1 – BIOASSESSMENT MONITORING GUIDELINES**

Bioassessment monitoring is required for projects that meet all of the following criteria:

1. The project directly discharges runoff to a freshwater wadeable stream (or streams) that is either: (a) listed by the State Water Board or USEPA as impaired due to sediment, and/or (b) tributary to any downstream water body that is listed for sediment; and/or have the beneficial use SPAWN & COLD & MIGRATORY

AND

2. Total project-related ground disturbance exceeds 30 acres. For all such projects, the discharger shall conduct bioassessment monitoring, as described in this section, to assess the effect of the project on the biological integrity of receiving waters.

### Bioassessment shall include:

1. The collection and reporting of specified instream biological data
2. The collection and reporting of specified instream physical habitat data

### Bioassessment Exception

1. If a site qualifies for bioassessment, but the construction schedule does not allow for pre-construction sampling within the index period, the discharger shall:
2. Receive Lahontan Water Board approval for the sampling exception
3. Invest \$7,500.00 times the number of samples required into the SWAMP program as compensation.
4. Make a check payable to: Cal State Chico Foundation (SWAMP Bank Account) or San Jose State Foundation (SWAMP Bank Account) and include the WDID# on the check for the amount calculated for the exempted project.
5. Send a copy of the check to the Lahontan Water Board office.

### Site Locations and Frequency

Macroinvertebrate samples shall be collected both before ground disturbance is initiated and after the project is completed. The “after” sample(s) shall be collected after at least one winter season resulting in surface runoff has transpired after project-related ground disturbance has ceased. “Before” and “after” samples shall be collected both upstream and downstream of the project’s discharge. Upstream samples should be taken immediately before the sites outfall and downstream samples should be taken immediately after the outfall (when safe to collect the samples). Samples should be collected for each freshwater wadeable stream that is listed



as impaired due to sediment, or tributary to a water body that is listed for sediment. Habitat assessment data shall be collected concurrently with all required macroinvertebrate samples.

#### Index Period (Timing of Sample Collection)

Macroinvertebrate sampling shall be conducted between July 1 and August 15 each year, after peak snowmelt flows but before the streams may become intermittent.

#### Field Methods for Macroinvertebrate Collections

In collecting macroinvertebrate samples, the discharger shall use the “Reachwide Benthos (Multi-habitat) Procedure” specified in Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California (Ode 2007).<sup>1</sup>

#### Physical - Habitat Assessment Methods

The discharger shall conduct, concurrently with all required macroinvertebrate collections, the “Full” suite of physical habitat characterization measurements as specified in Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California (Ode 2007), and as summarized in the Surface Water Ambient Monitoring Program’s Stream Habitat Characterization Form — Full Version.

#### Laboratory Methods

Macroinvertebrates shall be identified and classified according to the Standard Taxonomic Effort (STE) Level I of the Southwestern Association of Freshwater Invertebrate Taxonomists (SAFIT),<sup>2</sup> and using a fixed-count of 600 organisms per sample.

#### Quality Assurance

The discharger or its consultant(s) shall have and follow a quality assurance (QA) plan that covers the required bioassessment monitoring. The QA plan shall include, or be supplemented to include, a specific requirement for external QA checks (i.e., verification of taxonomic identifications and correction of data where errors are identified). External QA checks shall be performed on one of the discharger’s macroinvertebrate samples collected per calendar year, or ten percent of the samples per year (whichever is greater). QA samples shall be randomly selected. The external QA checks shall be paid for by the discharger, and performed by the California Department of Fish and Game’s Aquatic Bioassessment Laboratory. An alternate laboratory with equivalent or better expertise and performance may be used if approved in writing by State Water Board staff.

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<sup>1</sup> This document is available on the Internet at: [http://www.swrcb.ca.gov/swamp/docs/phab\\_sopr6.pdf](http://www.swrcb.ca.gov/swamp/docs/phab_sopr6.pdf).

<sup>2</sup> The current SAFIT STEs (28 November 2006) list requirements for both the Level I and Level II taxonomic effort, and are located at: [http://www.swrcb.ca.gov/swamp/docs/safit/ste\\_list.pdf](http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf). When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board’s SWAMP website.

## Sample Preservation and Archiving

The original sample material shall be stored in 70 percent ethanol and retained by the discharger until: 1) all QA analyses specified herein and in the relevant QA plan are completed; and 2) any data corrections and/or re-analyses recommended by the external QA laboratory have been implemented. The remaining subsampled material shall be stored in 70 percent ethanol and retained until completeness checks have been performed according to the relevant QA plan. The identified organisms shall be stored in 70 percent ethanol, in separate glass vials for each final ID taxon. (For example, a sample with 45 identified taxa would be archived in a minimum of 45 vials, each containing all individuals of the identified taxon.) Each of the vials containing identified organisms shall be labeled with taxonomic information (i.e., taxon name, organism count) and collection information (i.e., site name/site code, waterbody name, date collected, method of collection). The identified organisms shall be archived (i.e., retained) by the discharger for a period of not less than three years from the date that all QA steps are completed, and shall be checked at least once per year and “topped off” with ethanol to prevent desiccation. The identified organisms shall be relinquished to the State Water Board upon request by any State Water Board staff.

## Data Submittal

The macroinvertebrate results (i.e., taxonomic identifications consistent with the specified SAFIT STEs, and number of organisms within each taxa) shall be submitted to the State Water Board in electronic format. The State Water Board’s Surface Water Ambient Monitoring Program (SWAMP) is currently developing standardized formats for reporting bioassessment data. All bioassessment data collected after those formats become available shall be submitted using the SWAMP formats. Until those formats are available, the biological data shall be submitted in MS-Excel (or equivalent) format.<sup>3</sup>

The physical/habitat data shall be reported using the standard format titled SWAMP Stream Habitat Characterization Form — Full Version.<sup>4</sup>

## Invasive Species Prevention

In conducting the required bioassessment monitoring, the discharger and its consultants shall take precautions to prevent the introduction or spread of aquatic invasive species. At minimum, the discharger and its consultants shall follow the recommendations of the California Department of Fish and Game to minimize the introduction or spread of the New Zealand mudsnail.

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<sup>3</sup> Any version of Excel, 2000 or later, may be used.

<sup>4</sup> Available at:

[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/docs/reports/fieldforms\\_fullversion052908.pdf](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/fieldforms_fullversion052908.pdf)

## **ATTACHMENT D – STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR 122.41(a)(1).)

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR 122.41(c).)

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d).)

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR 122.41(e).)

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR 122.5(c).)

## **F. Inspection and Entry**

The Discharger shall allow the Lahontan Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 CFR 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 CFR 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR 122.41(i)(4).)

## **G. Bypass**

### **1. Definitions**

“Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i).)

“Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Lahontan Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR 122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR 122.41(m)(4)(i)(A));
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR 122.41(m)(4)(i)(B)); and
  - c. The Discharger submitted notice to the Lahontan Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR 122.41(m)(4)(i)(C).)
4. The Lahontan Water Board may approve an anticipated bypass, after considering its adverse effects, if the Lahontan Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR 122.41(m)(4)(ii).)
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR 122.41(m)(3)(i).)
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR 122.41(m)(3)(ii).)

## **H. Upset**

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 CFR 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of

claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR 122.41(n)(3)(i));
  - b. The permitted facility was, at the time, being properly operated (40 CFR 122.41(n)(3)(ii));
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR 122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR 122.41(n)(4).)

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR 122.41(f).)

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 CFR 122.41(b).)

### **C. Transfers**

This Order is not transferable to any person except after notice to the Lahontan Water Board. The Lahontan Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and

incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR 122.41(l)(3); § 122.61.)

### **III. STANDARD PROVISIONS – MONITORING**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR 122.41(j)(1).)
- B.** Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR 122.41(j)(4); § 122.44(i)(1)(iv).)

### **IV. STANDARD PROVISIONS – RECORDS**

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Lahontan Water Board Executive Officer at any time. (40 CFR 122.41(j)(2).)

#### **Records of monitoring information shall include:**

- 1.** The date, exact place, and time of sampling or measurements (40 CFR 122.41(j)(3)(i));
- 2.** The individual(s) who performed the sampling or measurements (40 CFR 122.41(j)(3)(ii));
- 3.** The date(s) analyses were performed (40 CFR 122.41(j)(3)(iii));
- 4.** The individual(s) who performed the analyses (40 CFR 122.41(j)(3)(iv));
- 5.** The analytical techniques or methods used (40 CFR 122.41(j)(3)(v)); and
- 6.** The results of such analyses. (40 CFR 122.41(j)(3)(vi).)

#### **Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):**

- 1.** The name and address of any permit applicant or Discharger (40 CFR 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 CFR 122.7(b)(2).)

## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Lahontan Water Board, State Water Board, or USEPA within a reasonable time, any information which the Lahontan Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Lahontan Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR 122.41(h); Wat. Code, § 13267.)

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Lahontan Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, V.B.6, and V.B.7 below. (40 CFR 122.41(k).)
2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 CFR 122.22(a)(1).)
3. For a partnership or sole proprietorship, all permit applications shall be signed by a general partner or the proprietor, respectively. (40 CFR 122.22(a)(2).)
4. For a municipality, State, federal, or other public agency, all permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a



senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR 122.22(a)(3).).

- 5.** All reports required by this Order and other information requested by the Lahontan Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2, 3, or 4 above, as appropriate, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a.** The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2, 3, or 4 above, as appropriate (40 CFR 122.22(b)(1));
  - b.** The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR 122.22(b)(2)); and
  - c.** The written authorization is submitted to the Lahontan Water Board and State Water Board. (40 CFR 122.22(b)(3).)
- 6.** If an authorization under Standard Provisions – Reporting V.B.5 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.5 above must be submitted to the Lahontan Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR 122.22(c).)
- 7.** Any person signing a document under Standard Provisions – Reporting V.B.2, 3, 4, or 5 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 CFR 122.22(d).)

## Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR 122.22(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Lahontan Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Lahontan Water Board. (40 CFR 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR 122.41(l)(4)(iii).)

## 24-Hour Reporting

5. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR 122.41(l)(6)(i).)
6. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR 122.41(l)(6)(ii)):
  - d. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR 122.41(l)(6)(ii)(A).)
  - e. Any upset that exceeds any effluent limitation in this Order. (40 CFR 122.41(l)(6)(ii)(B).)
7. The Lahontan Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR 122.41(l)(6)(iii).)

## **Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 CFR 122.41(l)(5).)

## **Planned Changes**

The Discharger shall give notice to the Lahontan Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii).)

## **Anticipated Noncompliance**

The Discharger shall give advance notice to the Lahontan Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR 122.41(l)(2).)

## **Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR 122.41(l)(7).)

## **Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Lahontan Water Board, State Water Board, or USEPA, the

Discharger shall promptly submit such facts or information. (40 CFR 122.41(l)(8).)

## **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A.** The Lahontan Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387

## ATTACHMENT E – ACTIVE TREATMENT SYSTEM (ATS) REQUIREMENTS

**Table 1 – Numeric Effluent Limitations, Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units**

| Parameter | Test Method  | Discharge Type     | Min. Detection Limit | Units | Numeric Action Level | Numeric Effluent Limitation   |
|-----------|--|--------------------|----------------------|-------|----------------------|---|
| Turbidity | EPA 0180.1 and/or field test with a calibrated portable instrument | For ATS discharges | 1                    | NTU   | N/A                  | 10 NTU for Daily Flow-Weighted Average & 20 NTU for Any Single Sample |

- A.** Dischargers choosing to implement an Active Treatment System (ATS) on their site shall comply with all of the requirements in this Attachment.
- B.** The discharger shall maintain a paper copy of each ATS specification onsite in compliance with the record retention requirements in the Special Provisions of this General Permit.

### **C. ATS Design, Operation and Submittals**

1. The ATS shall be designed and approved by a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Professional in Storm Water Quality (CPSWQ); a California registered civil engineer; or any other California registered engineer.
2. The discharger shall ensure that the ATS is designed in a manner to preclude the accidental discharge of settled floc<sup>1</sup> during floc pumping or related operations.
3. The discharger shall design outlets to dissipate energy from concentrated flows.
4. The discharger shall install and operate an ATS by assigning a lead person (or project manager) who has either a minimum of five years construction storm

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<sup>1</sup> Floc is defined as a clump of solids formed by the chemical action in ATS systems.

water experience or who is a licensed contractors specifically holding a California Class A Contractors license.<sup>2</sup>

5. The discharger shall prepare an ATS Plan that combines the site-specific data and treatment system information required to safely and efficiently operate an ATS. The ATS Plan shall be electronically submitted to the State Water Board at least 14 days prior to the planned operation of the ATS and a paper copy shall be available onsite during ATS operation. At a minimum, the ATS Plan shall include:
  - a. ATS Operation and Maintenance Manual for All Equipment.
  - b. ATS Monitoring, Sampling & Reporting Plan, including Quality Assurance/Quality Control (QA/QC).
  - c. ATS Health and Safety Plan.
  - d. ATS Spill Prevention Plan.
6. The ATS shall be designed to capture and treat (within a 72-hour period) a volume equivalent to the runoff from a 10-year, 24-hour storm event using a watershed runoff coefficient of 1.0.

#### **D. Treatment – Chemical Coagulation/Flocculation**

1. Jar tests shall be conducted using water samples selected to represent typical site conditions and in accordance with ASTM D2035-08 (2003).
2. The discharger shall conduct, at minimum, six site-specific jar tests (per polymer with one test serving as a control) for each project to determine the proper polymer and dosage levels for their ATS.
3. Single field jar tests may also be conducted during a project if conditions warrant, for example if construction activities disturb changing types of soils, which consequently cause change in storm water and runoff characteristics.

#### **E. Residual Chemical and Toxicity Requirements**

1. The discharger shall utilize a residual chemical test method that has a method detection limit (MDL) of 10% or less than the maximum allowable threshold

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<sup>2</sup> Business and Professions Code Division 3, Chapter 9, Article 4, Class A Contractor: A general engineering contractor is a contractor whose principal contracting business is in connection with fixed works requiring specialized engineering knowledge and skill. [<http://www.cslb.ca.gov/General-Information/library/licensing-classifications.asp>].

concentration<sup>3</sup> (MATC) for the specific coagulant in use and for the most sensitive species of the chemical used.

2. The discharger shall utilize a residual chemical test method that produces a result within one hour of sampling.
3. The discharger shall have a California State certified laboratory validate the selected residual chemical test. Specifically the lab will review the test protocol, test parameters, and the detection limit of the coagulant. The discharger shall electronically submit this documentation as part of the ATS Plan.
4. If the discharger cannot utilize a residual chemical test method that meets the requirements above, the discharger shall operate the ATS in Batch Treatment<sup>4</sup> mode.
5. A discharger planning to operate in Batch Treatment mode shall perform toxicity testing in accordance with the following:
  - a. The discharger shall initiate acute toxicity testing on effluent samples representing effluent from each batch prior to discharge<sup>5</sup>. All bioassays shall be sent to a laboratory certified by the Department of Public Health Environmental Laboratory Accreditation Program (ELAP). The required field of testing number for Whole Effluent Toxicity (WET) testing is E113.<sup>6</sup>
  - b. Acute toxicity tests shall be conducted with the following species and protocols. The methods to be used in the acute toxicity testing shall be those outlined for a 96-hour acute test in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, USEPA-841-R-02-012" for Fathead minnow, *Pimephales promelas* (fathead minnow). Acute toxicity for *Oncorhynchus mykiss* (Rainbow Trout) may be used as a substitute for testing fathead minnows.
  - c. All toxicity tests shall meet quality assurance criteria and test acceptability criteria in the most recent versions of the EPA test method for WET testing.
  - d. The discharger shall electronically report all acute toxicity testing.

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<sup>3</sup> The Maximum Allowable Threshold Concentration (MATC) is the allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. A typical MATC would be: The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

<sup>4</sup> Batch Treatment mode is defined as holding or recirculating the treated water in a holding basin or tank(s) until treatment is complete or the basin or storage tank(s) is full.

<sup>5</sup> This requirement only requires that the test be initiated prior to discharge.

<sup>6</sup> [http://www.dhs.ca.gov/ps/ls/elap/pdf/FOT\\_Desc.pdf](http://www.dhs.ca.gov/ps/ls/elap/pdf/FOT_Desc.pdf).

## **F. Filtration**

1. The ATS shall include a filtration step between the coagulant treatment train and the effluent discharge. This is commonly provided by sand, bag, or cartridge filters, which are sized to capture suspended material that might pass through the clarifier tanks.
2. Differential pressure measurements shall be taken to monitor filter loading and confirm that the final filter stage is functioning properly.

## **G. Residuals Management**

1. Sediment shall be removed from the storage or treatment cells as necessary to ensure that the cells maintain their required water storage (i.e., volume) capability.
2. Handling and disposal of all solids generated during ATS operations shall be done in accordance with all local, state, and federal laws and regulations.

## **H. ATS Instrumentation**

1. The ATS shall be equipped with instrumentation that automatically measures and records effluent water quality data and flow rate.
2. The minimum data recorded shall be consistent with the Monitoring and Reporting requirements below, and shall include:
  - a. Influent Turbidity
  - b. Effluent Turbidity
  - c. Influent pH
  - d. Effluent pH
  - e. Residual Chemical
  - f. Effluent Flow rate
  - g. Effluent Flow volume
3. Systems shall be equipped with a data recording system, such as data loggers or webserver-based systems, which records each measurement on a frequency no longer than once every 15 minutes.



4. Cumulative flow volume shall be recorded daily. The data recording system shall have the capacity to record a minimum of seven days continuous data.
5. Instrumentation systems shall be interfaced with system control to provide auto shutoff or recirculation in the event that effluent measurements exceed turbidity or pH.
6. The system shall also assure that upon system upset, power failure, or other catastrophic event, the ATS will default to a recirculation mode or safe shut down.
7. Instrumentation (flow meters, probes, valves, streaming current detectors, controlling computers, etc.) shall be installed and maintained per manufacturer's recommendations, which shall be included in the QA/QC plan.
8. The QA/QC plan shall also specify calibration procedures and frequencies, instrument method detection limit or sensitivity verification, laboratory duplicate procedures, and other pertinent procedures.
9. The instrumentation system shall include a method for controlling coagulant dose, to prevent potential overdosing. Available technologies include flow/turbidity proportional metering, periodic jar testing and metering pump adjustment, and ionic charge measurement controlling the metering pump.

#### **I. ATS Effluent Discharge**

1. ATS effluent shall comply with all provisions and prohibitions in this General Permit, specifically the NELs.
2. NELs for discharges from an ATS:
  - a. Turbidity of all ATS discharges shall be less than 10 NTU for daily flow-weighted average of all samples and 20 NTU for any single sample.
  - b. Residual Chemical shall be < 10% of MATC<sup>7</sup> for the most sensitive species of the chemical used.
3. If an analytical effluent sampling result is outside the range of pH NELs (i.e., is below the lower NEL for pH or exceeds the upper NEL for pH) or exceeds the turbidity NEL (as listed in Table 1), the discharger is in violation of this General

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<sup>7</sup> The Maximum Allowable Threshold Concentration (MATC) is the allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

Permit and shall electronically file the results in violation within 24-hours of obtaining the results.

4. If ATS effluent is authorized to discharge into a sanitary sewer system, the discharger shall comply with any pre-treatment requirements applicable for that system. The discharger shall include any specific criteria required by the municipality in the ATS Plan.

5. Compliance Storm Event:

Discharges of storm water from ATS shall comply with applicable NELs (above) unless the storm event causing the discharges is determined after the fact to be equal to or larger than the Compliance Storm Event. The Compliance Storm Event for ATS discharges is the 20-year, 1-hour storm, which is equal to 1 inch of rainfall in a 1-hour period. This exemption is dependent on the submission of rain gauge data verifying the storm event is equal to or larger than the Compliance Storm.

## **J. Operation and Maintenance Plan**

1. Each Project shall have a site-specific Operation and Maintenance (O&M) Manual covering the procedures required to install, operate and maintain the ATS.<sup>8</sup>
2. The O&M Manual shall only be used in conjunction with appropriate project-specific design specifications that describe the system configuration and operating parameters.
3. The O&M Manual shall have operating manuals for specific pumps, generators, control systems, and other equipment.

## **K. Sampling and Reporting Quality Assurance/ Quality Check (QA/QC) Plan**

4. A project-specific QA/QC Plan shall be developed for each project. The QA/QC Plan shall include at a minimum:
  - a. Calibration – Calibration methods and frequencies for all system and field instruments shall be specified.
  - b. Method Detection Limits (MDLs) – The methods for determining MDLs shall be specified for each residual coagulant measurement method. Acceptable minimum MDLs for each method, specific to individual coagulants, shall be specified.

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<sup>8</sup> The manual is typically in a modular format covering generalized procedures for each component that is utilized in a particular system.

- c. Laboratory Duplicates – Requirements for monthly laboratory duplicates for residual coagulant analysis shall be specified.

#### **L. Personnel Training**

1. Operators shall have training specific to using an ATS and liquid coagulants for storm water discharges in California.
2. The training shall be in the form of a formal class with a certificate and requirements for testing and certificate renewal.
3. Training shall include a minimum of eight hours classroom and 32 hours field training. The course shall cover the following topics:
  - a. Coagulation Basics –Chemistry and physical processes
  - b. ATS System Design and Operating Principles
  - c. ATS Control Systems
  - d. Coagulant Selection – Jar testing, dose determination, etc.
  - e. Aquatic Safety/Toxicity of Coagulants, proper handling and safety
  - f. Monitoring, Sampling, and Analysis
  - g. Reporting and Recordkeeping
  - h. Emergency Response

#### **M. Active Treatment System (ATS) Monitoring Requirements**

Any discharger who deploys an ATS on their site shall conduct the following:

1. Visual Monitoring
  - a. A designated responsible person shall be on site daily at all times during treatment operations.
  - b. Daily on-site visual monitoring of the system for proper performance shall be conducted and recorded in the project data log.
    - i. The log shall include the name and phone number of the person responsible for system operation and monitoring.

- ii. The log shall include documentation of the responsible person's training.

## 2. Operational and Compliance Monitoring

- a. Flow shall be continuously monitored and recorded at not greater than 15-minute intervals for total volume treated and discharged.
- b. Influent and effluent pH must be continuously monitored and recorded at not greater than 15-minute intervals.
- c. Influent and effluent turbidity (expressed in NTU) must be continuously monitored and recorded at not greater than 15-minute intervals.
- d. The type and amount of chemical used for pH adjustment, if any, shall be monitored and recorded.
- e. Dose rate of chemical used in the ATS system (expressed in mg/L) shall be monitored and reported 15-minutes after startup and every 8 hours of operation.
- f. Laboratory duplicates – monthly laboratory duplicates for residual coagulant analysis must be performed and records shall be maintained onsite.
- g. Effluent shall be monitored and recorded for residual chemical/additive levels.
- h. If a residual chemical/additive test does not exist and the ATS is operating in a batch treatment mode of operation refer to the toxicity monitoring requirements below.

## 3. Toxicity Monitoring

A discharger operating in batch treatment mode shall perform toxicity testing in accordance with the following:

- a. The discharger shall initiate acute toxicity testing on effluent samples representing effluent from each batch prior to discharge.<sup>9</sup> All bioassays shall be sent to a laboratory certified by the Department of Public Health Environmental Laboratory Accreditation Program (ELAP). The required field of testing number for Whole Effluent Toxicity (WET) testing is E113.<sup>10</sup>
- b. Acute toxicity tests shall be conducted with the following species and protocols. The methods to be used in the acute toxicity testing shall be those outlined for a 96-hour acute test in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms,

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<sup>9</sup> This requirement only requires that the test be initiated prior to discharge.

<sup>10</sup> [http://www.dhs.ca.gov/ps/ls/elap/pdf/FOT\\_Desc.pdf](http://www.dhs.ca.gov/ps/ls/elap/pdf/FOT_Desc.pdf).

USEPA-841-R-02-012” for Fathead minnow, *Pimephales promelas* or Rainbow trout *Oncorhynchus mykiss* may be used as a substitute for fathead minnow.

- c. All toxicity tests shall meet quality assurance criteria and test acceptability criteria in the most recent versions of the EPA test method for WET testing.<sup>11</sup>

#### 4. Reporting and Recordkeeping

At a minimum, every 30 days a LRP representing the discharger shall access the State Water Boards Storm Water Multi-Application and Report Tracking system (SMARTS) and electronically upload field data from the ATS. Records must be kept for three years after the project is completed .

#### 5. Non-compliance Reporting

- a. Any indications of toxicity or other violations of water quality objectives shall be reported to the appropriate regulatory agency as required by this General Permit.
- b. Upon any measurements that exceed water quality standards, the system operator shall immediately notify his supervisor or other responsible parties, who shall notify the Regional Water Board.
- c. If any monitoring data exceeds any applicable NEL in this General Permit, the discharger shall electronically submit a NEL Violation Report to the State Water Board within 24 hours after the NEL exceedance has been identified.
  - i. ATS dischargers shall certify each NEL Violation Report in accordance with the Special Provisions for Construction Activity in this General Permit.
  - ii. ATS dischargers shall retain an electronic or paper copy of each NEL Violation Report for a minimum of three years after the date the annual report is filed.
  - iii. ATS dischargers shall include in the NEL Violation Report:
    - (1) The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”);
    - (2) The date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation; and

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<sup>11</sup> <http://www.epa.gov/waterscience/methods/wet/>.

(3) A description of the current onsite BMPs, and the proposed corrective actions taken to manage the NEL exceedance.

- iv. Compliance Storm Event - In the event that an applicable NEL has been exceeded during a storm event equal to or larger than the Compliance Storm Event, ATS dischargers shall report the on-site rain gauge reading and nearby governmental rain gauge readings for verification.

## ATTACHMENT F - WASTE DISCHARGE PROHIBITION INFORMATION FOR ACTIVITIES IN STREAM ENVIRONMENT ZONES AND FLOODPLAINS OF THE LAKE TAHOE HYDROLOGIC UNIT

To protect beneficial uses and achieve water quality objectives, the *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains prohibitions against waste discharges to surface waters and to lands within 100-year floodplains in the Lake Tahoe Hydrologic Unit (HU), and prohibitions against "permanent disturbance" in Stream Environment Zones (SEZs) in the Lake Tahoe HU. These prohibitions may apply to certain construction activities conducted in these areas.

### I. Waste Discharge Prohibitions and Exemptions

#### A. 100-year Floodplains/Highwater Rim

Chapter 5, section 5.2 of the Basin Plan specifies the following **discharge prohibitions** for activities within 100-year floodplains:

8. and 9. "The discharge, or threatened discharge, attributable to human activities, of solid or liquid waste materials, including soil, silt, clay, sand and other organic and earthen materials to lands below the highwater rim of Lake Tahoe or within the 100-year floodplain of any tributary to Lake Tahoe is prohibited."

Chapter 5, section 5.7 provides that **exemptions** may be granted for the following categories of projects that are applicable to construction activities in 100-year floodplains.

1. Public outdoor recreational facilities if: (a) the project is a necessary part of a public agency's long range plans for public outdoor recreation; (b) the project, by its very nature, must be sited in a floodplain; (c) there is no feasible alternative that would reduce the extent of encroachment in a floodplain; and (d) the impacts on the floodplain are minimized.
2. Public service facilities if: (a) the project is necessary for public health, safety or environmental protection, (b) there is no reasonable alternative, including spans, which avoids or reduces the extent of encroachment in the floodplain, and (c) impacts on the floodplain are minimized.
3. Projects that require access across floodplains to otherwise buildable sites if: (a) there is no reasonable alternative that avoids or reduces the extent of encroachment in the floodplain; and (b) the impacts on the floodplain are minimized
4. Erosion control projects, habitat restoration projects, SEZ restoration projects and similar projects provided that the project is necessary for environmental

protection and there is no reasonable alternative which avoids or reduces the extent of encroachment in the floodplain.

## ***B. Stream Environment Zones***

Chapter 5 (page 5.2-3) of the Basin Plan specifies the following **discharge prohibitions** for activities within SEZs:

13. "The discharge or threatened discharge, attributable to new development in Stream Environment Zones, of solid or liquid waste, including soil, silt, sand, clay, rock, metal, plastic, or other organic, mineral or earthen materials, to Stream Environment Zones in the Lake Tahoe basin is prohibited."

"New development" as used in the Prohibition 13 means ". . . construction activity resulting in permanent soil disturbance . . . New development does not include maintenance or repair of an existing structure or the replacement of any existing structure with another structure on the same parcel of no greater land coverage." This means that if an activity occurs in an SEZ that does not result in permanent disturbance, the prohibition is not violated.

Chapter 5, section 5.8 provides that **exemptions** may be granted for the following categories of projects that are applicable to construction activities in SEZs.

1. Public Outdoor Recreation facilities, when all of the following findings can be made: (a) the project, by its very nature, must be sited in an SEZ; (b) there is no feasible alternative that would reduce the extent of SEZ encroachment; (c) impacts are fully mitigated; and (d) SEZs are restored in an amount 1.5 times the area of SEZ disturbed or developed for the project.
2. Public Service Facilities if all the following findings can be made: (a) the project is necessary for public health, safety or the environment; (b) there is no reasonable alternative, including spans, which avoids or reduces the extent of encroachment; (c) the impacts are fully mitigated; and (d) SEZ lands are restored in an amount 1.5 times the area of land developed or disturbed by the project
3. Projects that require access across SEZs to otherwise buildable sites if all of the following findings can be made: (a) there is no reasonable alternative that avoids or reduces the extent of encroachment; (b) impacts are fully mitigated; and (c) SEZ lands are restored in an amount 1.5 times the area of SEZ disturbed or developed by the project
4. New development in man-modified SEZs after the Lahontan Water Board has reclassified them according to the procedure.



5. For erosion control projects, habitat restoration projects, wetland restoration projects, SEZ restoration projects, and similar projects, programs and facilities, if:
  - a. The project, program, or facility is necessary for environmental protection;
  - b. There is no reasonable alternative, including relocation, which avoids or reduces the extent of encroachment in the SEZ; and
  - c. Impacts are fully mitigated

In accordance with the Basin Plan, impacts to SEZs due to erosion control projects, habitat restoration projects, wetland restoration projects, or SEZ restoration projects do not need to meet the 1.5:1 restoration requirement and may be granted exemptions to the prohibitions against discharges to surface waters.

## **II. Exemption Process**

In order to obtain an exemption to the waste discharge prohibitions described above, applicants must provide Water Board staff with the information needed to justify the exemption. If a project activity qualifies, staff will prepare a draft exemption and circulate the proposed action to the Water Board members and other interested parties for a 10-day review and comment period. If no objections are received, the Water Board's Executive Officer is authorized to grant the exemptions. Exemptions will be issued by a written notice to the applicant, typically provided with the NOA for projects involving more than one acre of land disturbance.

## ATTACHMENT G – WATER QUALITY OBJECTIVES FOR CERTAIN WATER BODIES IN THE LAKE TAHOE HYDROLOGIC UNIT

**Table G-1. WQOs for Water Bodies in the Lake Tahoe Hydrologic Unit**

|    | Surface Waters      | Objective (mg/L except as noted) <sup>1,2</sup> |           |                 |           |   |          |          |
|----|---------------------|---|-----------|-----------------|-----------|---|----------|----------|
|    |                     | TDS   | Cl        | SO <sub>4</sub> | B         | N                                       | P        | Fe       |
| 1  | Lake Tahoe          | 60/65   | 3.0/4.0   | 1.0/2.0         | 0.01/ -   | 0.15/ -                                 | 0.008/ - | --       |
| 2  | Fallen Leaf Lake    | 50/ -   | 0.30/0.50 | 1.3/1.4         | 0.01/0.02 | See Table I-2 for additional objectives |          |          |
| 3  | Griff Creek         | 80/ -   | 0.40/ -   | --              | --        | 0.19/ -                                 | 0.010/ - | 0.03/ -  |
| 4  | Carnelian Bay Creek | 80/ -   | 0.40/ -   | --              | --        | 0.19/ -                                 | 0.015/ - | 0.03/ -  |
| 5  | Watson Creek        | 80/ -   | 0.35/ -   | --              | --        | 0.22/ -                                 | 0.015/ - | 0.04/ -  |
| 6  | Dollar Creek        | 80/ -   | 0.30/ -   | --              | --        | 0.16/ -                                 | 0.030/ - | 0.03/ -  |
| 7  | Burton Creek        | 90/ -   | 0.30/ -   | --              | --        | 0.1/6 -                                 | 0.015/ - | 0.03/ -  |
| 8  | Ward Creek          | 70/ 85  | 0.30/0.50 | 1.4/ 2.8        | --        | 0.15/ -                                 | 0.015/ - | 0.03/ -  |
| 9  | Blackwood Creek     | 70/ 90  | 0.30/ -   | --              | --        | 0.19/ -                                 | 0.015/ - | 0.03/ -  |
| 10 | Madden Creek        | 60/ -   | 0.10/0.20 | --              | --        | 0.18/ -                                 | 0.015/ - | 0.015/ - |
| 11 | McKinney Creek      | 55/ -   | 0.40/0.50 | --              | --        | 0.19/ -                                 | 0.015/ - | 0.03/ -  |
| 12 | General Creek       | 50/ 90  | 1.0/1.5   | 0.4/ 0.5        | --        | 0.15/ -                                 | 0.015/ - | 0.03/ -  |
| 13 | Meeks Creek         | 45/ -   | 0.40/ -   | --              | --        | 0.23/ -                                 | 0.010/ - | 0.07/ -  |
| 14 | Lonely Gulch Creek  | 45/ -   | 0.30/ -   | --              | --        | 0.19/ -                                 | 0.015/ - | 0.03/ -  |
| 15 | Eagle Creek         | 35/-  | 0.30/-    | --              | --        | 0.20/-                                  | 0.010/-  | 0.03/-   |
| 16 | Cascade Creek       | 30/-  | 0.40/-    | --              | --        | 0.21/-                                  | 0.005/-  | 0.01/-   |
| 17 | Tallac Creek        | 60/-  | 0.40/-    | --              | --        | 0.19/-                                  | 0.015/-  | 0.03/-   |
| 18 | Taylor Creek        | 35/-  | 0.40/0.50 | --              | --        | 0.17/-                                  | 0.010/-  | 0.02/-   |
| 19 | Upper Truckee River | 55/75   | 4.0/5.5   | 1.0/2.0         | --        | 0.19/-                                  | 0.015/-  | 0.03/-   |
| 20 | Trout Creek         | 50/60   | 0.15/0.20 | --              | --        | 0.19/-                                  | 0.015/-  | 0.03/-   |

<sup>1</sup> Annual average value/90th percentile value.

<sup>2</sup> Objectives are as mg/L and are defined as follows:

B     Boron  
 Cl     Chloride  
 SO<sub>4</sub>   Sulfate  
 Fe     Iron, Total  
 N     Nitrogen, Total  
 P     Phosphorus, Total  
 TDS   Total Dissolved Solids (Total Filterable Residues)

**Table G-2. WQOs for Fallen Leaf Lake**

| Constituent  | Objective (See Fig. 3-6, location 2)   |
|--|--|
| pH <sup>1</sup>  | 6.5 - 7.9  |
| Temperature <sup>2</sup>   | Hypolimnion -15 °C Bottom (105m) - 7.5 °C at no time shall water be increased by more than 2.8 C (5 °F). |
| Dissolved oxygen <sup>3</sup>  | % saturation above 80% and DO >7 mg/L except if saturation exceeds 80% DO at bottom (105m) > 6mg/L       |
| Total nitrogen <sup>4</sup>  | 0.087 <sup>5</sup> /0.114 <sup>6</sup> /0.210 <sup>7</sup>   |
| Dissolved inorganic – N <sup>8</sup>                                   | 0.007 / 0.010 / 0.023  |
| Total phosphorus   | 0.008 / 0.010 / 0.018  |
| Soluble reactive -P  | 0.001 / 0.002 / 0.009  |
| Soluble reactive iron  | 0.004 / 0.005 / 0.012  |
| Total reactive iron  | 0.005 / 0.007 / 0.030  |
| Chlorophyll-a <sup>9,10</sup>  | 0.6 / 0.9 / 1.5  |
| Clarity - Secchi depth <sup>11</sup> - Vertical extinction coefficient | 18.5 / 16.0 <sup>12</sup> / 13.6 <sup>13</sup><br>0.146 / 0.154 / 0.177 <sup>14</sup>                    |
| Phytoplankton cell counts <sup>15</sup>                                | 219 / 280 / 450  |

- <sup>1</sup> 0.5 units above and 0.5 units below 1991 maximum and minimum values. Also reflects stability of this constituent throughout the year.
- <sup>2</sup> Based on 1991 data. Indicates that if temperature in the hypolimnion during the summer exceeds 15 °C or if the water at 105m exceeds 7.5 °C this would constitute a significant change from existing conditions. Unless there is a anthropogenic source of thermal effluent, which does not currently exist, changes in water temperature in Fallen Leaf Lake are natural. Objectives apply at any time during the defining period.
- <sup>3</sup> Based on coldwater habitat protection and 1991 data base. The need for an objective for the bottom (105m) results from the desire to control primary productivity and deposition of organic matter on the bottom. A decline in bottom DO to below 6 mg/L would indicate a fundamental shift in the trophic state of Fallen Leaf Lake.
- <sup>4</sup> Because of the similarity between the mid-lake and nearshore sites, Fallen Leaf Lake objectives for N, P and Fe are based on the combined mid-lake 8 m and 45 m, and nearshore 8 m concentrations. Units are mg N/L, mg P/L and mg Fe/L.
- <sup>5</sup> Mean annual concentration (May - October) unless otherwise noted.
- <sup>6</sup> 90th percentile value unless otherwise noted.
- <sup>7</sup> Maximum allowable value; 1.5 times the maximum 1991 value. No single measurement should exceed this value unless otherwise noted.
- <sup>8</sup> DIN = NO<sub>3</sub>+NO<sub>2</sub>+NH<sub>4</sub>
- <sup>9</sup> Corrected for phaeophytin degradation pigments.
- <sup>10</sup> Units are µg chl-a/L.
- <sup>11</sup> Units are meters.
- <sup>12</sup> 10th percentile since clarity increases with increasing Secchi depth.
- <sup>13</sup> Represents 15% loss of clarity from 10th or 90th percentile value.
- <sup>14</sup> Calculated in the photic zone between 1 m below surface to 35 m. Units are per meter.
- <sup>15</sup> Units are cells per milliliter.

## ATTACHMENT H - RAIN EVENT ACTION PLAN (REAP) TEMPLATE

|   |                                |                   |
|---|--------------------------------|-------------------|
| 1. Date:  | 2. Project name & WDID #:      |                   |
| 3. Date rain predicted to occur:  | 4. Predicted % chance of rain: |                   |
| 5. Site information:<br><br>Site name, Location (address, physical description, nearest landmark and/or access point)   |                                |                   |
| 6. Project storm water manager information:<br><br>Name, Company, Phone # (24/7)  |                                |                   |
| 7. Review information & scheduling: <ul style="list-style-type: none"> <li><input type="checkbox"/> Inform site personnel of predicted rain</li> <li><input type="checkbox"/> Check scheduled activities and reschedule as needed</li> <li><input type="checkbox"/> Alert erosion/sediment control provider (if applicable)</li> <li><input type="checkbox"/> Alert sample collection contractor (if applicable)</li> <li><input type="checkbox"/> Schedule staff for extended rain inspections (including weekends &amp; holidays)</li> <li><input type="checkbox"/> Check erosion and sediment control (ESC) material stock</li> <li><input type="checkbox"/> Review BMP map/SWPPP</li> <li><input type="checkbox"/> Other _____</li> <li><input type="checkbox"/> _____</li> <li><input type="checkbox"/> _____</li> </ul> |                                |                   |
| 8. Record all active and inactive disturbed soil areas (DSAs), material storage areas, stockpiles, vehicle and equipment storage and maintenance areas, and waste management areas. Cross-reference to BMP plans by sheet #.<br>For each area, list action items to perform and areas to review prior to the rain event. Potential action and review items are included in item 10, below.  |                                |                   |
| DSA/Sheet #   | Action(s) needed               | Responsible party |
| Inspected by  |                                |                   |
| DSA/Sheet #   | Action(s) needed               | Responsible party |
| Inspected by  |                                |                   |

|  |                  |                   |
|--|------------------|-------------------|
| DSA/Sheet #                                | Action(s) needed | Responsible party |
| Inspected by                               |                  |                   |
| DSA/Sheet #                                | Action(s) needed | Responsible party |
| Inspected by                               |                  |                   |
| DSA/Sheet #                                | Action(s) needed | Responsible party |
| Inspected by                               |                  |                   |
| DSA/Sheet #                                | Action(s) needed | Responsible party |
| Inspected by                               |                  |                   |
| Stockpile/Sheet #                          | Action(s) needed | Responsible party |
| Inspected by                               |                  |                   |
| Stockpile/Sheet #                          | Action(s) needed | Responsible party |
| Inspected by                               |                  |                   |
| Stockpile/Sheet #                          | Action(s) needed | Responsible party |
| Inspected by                               |                  |                   |
| Vehicle and equipment storage area/Sheet # | Action(s) needed | Responsible party |
| Inspected by                               |                  |                   |
| Waste management area/Sheet #              | Action(s) needed | Responsible party |
| Inspected by                               |                  |                   |

9. Describe locations and amounts of additional rain event erosion and sediment control materials needed to carry out REAP:

10. Potential action & review items

**10a. Review site BMPs**

- Adequate capacity in sediment basins and traps
- Site perimeter controls in place
- Disturbed area controls in place
- Catch basin and drop inlet protection in place and cleaned
- Temporary erosion controls deployed and installed per specification
- Temporary perimeter controls deployed around disturbed areas and stockpiles
- Roads swept; site ingress and egress points stabilized
- Other: \_\_\_\_\_

**10b. Material storage/stockpile areas**

- Material under cover or stored
- Perimeter control around stockpiles
- Other: \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**10c. Waste management areas**

- Dumpsters closed
- Drain holes plugged
- Recycling bins covered
- Concrete wash-out stations covered
- Sanitary stations bermed and protected from tipping
- Other \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**10d. Spill and drips**

- All incident spills and drips, including paint, stucco, fuel, and oil cleaned
- Drip pans emptied
- Other \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

11. Attach a printout of the weather forecast from the NOAA website to the REAP. Insert REAP in SWPPP.

12. Certification:

I certify under penalty of law that this Rain Event Action Plan (REAP) will be performed in accordance with the General Permit by me or under my direction or supervision.

---

Qualified SWPPP Practitioner Signature & Date, Printed Name

# **ATTACHMENT I - SUGGESTED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) OUTLINE**

## **I. Introduction and Certifications**

- A.** SWPPP Objectives
- B.** SWPPP Implementation Schedule
- C.** Permit Registration Documents
- D.** Certification and Training Requirements
- E.** Contractor List
- F.** Emergency contact person and 24-hour phone number
- G.** SWPPP Availability and Public Records Access
- H.** Required Changes (Include SWPPP amendment log form in Appendices)

## **II. Project Information**

- A.** Project Description, site address and driving directions
- B.** WDID
- C.** Construction Schedule
- D.** Potential Construction Site Pollutants of Concern and Sources
- E.** Site Location Map(s)

## **III. Best Management Practices**

- A.** Site Management Narrative (include specs in Appendix X)
- B.** Sediment and Erosion/Stabilization Control Narrative (include specs in Appendices)
- C.** Non-Stormwater and Material Management Narrative (include specs in Appendices)
- D.** Dewatering and Diversions Plan Narrative (include specs in Appendices)
- E.** Active Treatment System Plan Narrative (include ATS Plan in Appendices)
- F.** Post-Construction Stormwater Management Measures Narrative (include specs in Appendices)
- G.** Schedule for BMP Implementation
- H.** BMP and Disturbed Soil Area (DSA) maps



#### **IV. BMP Inspection, Maintenance, and Rain Event Action Plans**

- A.** BMP Inspection and Maintenance Narrative (include forms and checklists in Appendices)
- B.** Rain Event Action Plan Narrative (Include REAP template in Appendices)

#### **V. Construction Site Monitoring and Reporting Plan (CSMRP)**

- A.** Purpose
- B.** Visual Monitoring (Inspections)
- C.** Water Quality Sampling and Analysis
- D.** Watershed Monitoring Option
- E.** Quality Assurance and Quality Control
- F.** Reporting Requirements and Records Retention
- G.** Non-Compliance Reporting
- H.** Annual Report
- I.** Final Report

#### **Appendices**

- A.** SWPPP Amendment Log Form
- B.** BMP Standard Specifications
- C.** Dewatering and Diversion Specifications (if applicable)
- D.** ATS Plan (if applicable)
- E.** Visual Monitoring/BMP Inspection Forms and Checklist Templates
- F.** Rain Event Action Plan Template

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

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<http://www.waterboards.ca.gov/lahontan>

**ORDER NO. R6T-2011-0019**

**NPDES NO. CAG616002**

**FACT SHEET FOR**

**GENERAL WASTE DISCHARGE REQUIREMENTS  
AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY IN  
THE LAKE TAHOE HYDROLOGIC UNIT, COUNTIES OF  
ALPINE, EL DORADO, AND PLACER**

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## **I. PERMIT INFORMATION**

### **A. Background**

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On November 16, 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that established storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999 lowered the permitting threshold from five acres to one acre. Further, the NPDES permit must require implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate pollutants in storm water runoff. The NPDES permit must also include additional requirements necessary to implement applicable water quality standards and general waste discharge requirements pursuant to the California Water Code.

On March 10, 2005 the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) adopted Order No. R6T-2005-0007 as the most recent general NPDES Construction Activity Storm Water General Permit for the discharge of storm water associated with construction and land disturbing activities in the Lake Tahoe Hydrologic Unit. The General Permit accompanying this Fact Sheet supersedes Order No. R6T-2005-0007, except for enforcement purposes, for the discharge of storm water runoff from construction sites.

This General Permit authorizes discharges of storm water associated with construction activity for dischargers that agree to comply with all requirements, provisions, limitations and prohibitions in the permit. This General Permit regulates discharges of pollutants in storm water associated with construction activity (storm water discharges) to waters of the United States from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface.

Discharges of non-storm water to land may be necessary for the completion of certain construction projects. Such discharges include, but are not limited to, irrigating vegetation for erosion control measures, pipe flushing and testing,

uncontaminated groundwater dewatering, fire hydrant flushing, and water to control dust. Such discharges to land are authorized by this General Permit as long as they (a) comply with the prohibitions established within the General Permit, (b) do not cause or contribute to a violation of any water quality standard, (c) do not violate any other provision of this General Permit, and (d) do not require a non-storm water General Permit as issued by the Lahontan Water Board.

This General Permit does not preempt or supersede the authority of local storm water management agencies to prohibit, restrict, or control storm water discharges to municipal separate storm sewer systems (MS4s) or other watercourses within their jurisdiction.

Dischargers of storm water runoff to surface waters of the United States are currently regulated by Order No. R6T-2005-0007, which was adopted on March 10, 2005 and expired on March 10, 2010. The terms and conditions of the Order No. R6T-2005-0007 have been automatically continued and remain in effect until new waste discharge requirements (WDRs) and NPDES permit are adopted pursuant to this Order.

## **II. CONDITIONS FOR PERMIT COVERAGE AND NOTIFICATION REQUIREMENTS**

### **A. Legally Responsible Person (LRP)**

The application requirements of the General Permit establish a mechanism to clearly identify the responsible parties, locations, and scope of operations of dischargers covered by the General Permit and to document the discharger's knowledge of the General Permit's requirements. To obtain coverage, the legally responsible person (LRP) or the LRP's Approved Signatory must certify and file Permit Registration Documents (PRDs) prior to the commencement of construction activity. A detailed explanation of the LRP and Approved Signatory is provided in Attachment B (Glossary) of this General Permit

### **B. Permit Effective Date**

This General Permit is effective April 14, 2011 and provides a process for covering new dischargers and those previously covered under R6T-2005-0007 whose projects are eligible to continue under this General Permit. All dischargers requiring coverage under this General Permit on or after April 14, 2011, must file the required PRDs and filing fee, and prior to commencing land disturbing activities, must receive a written Notice of Applicability (NOA) from the Lahontan Water Board indicating the date that the permit coverage begins under the General Permit and the Waste Discharge Identification (WDID) code issued for the project.

Previously covered dischargers subject to General Permit No. R6T-2005-0007 will continue coverage under, and must comply with General Permit No. R6T-2005-0007 until a notice of termination for the project is processed, continuing coverage is granted under this General Permit, or December 1, 2011, whichever comes first. Previously covered dischargers that plan to continue land disturbing construction activities and permit coverage beyond December 1, 2011 will be notified of requirements to re-register in accordance with this General Permit on or before September 1, 2011. This will allow the PRDs to be processed and require dischargers to winterize construction sites by October 15, 2011 in accordance with the new requirements of the updated Tahoe CGP. On and after December 1, 2011, General Permit No R6T-2005-0007 is rescinded and all coverage under General Permit No. R6T-2005-0007 is terminated. Previously enrolled dischargers failing to file PRDs or other information required to complete an application to renew coverage under this General Permit will lose permit coverage on December 1, 2011.

### **C. Registration Process**

To obtain coverage, the LRP or Approved Signatory must file Permit Registration Documents (PRDs) and receive written approval by the Lahontan Water Board prior to the commencement of construction activity. Failure to obtain coverage under this General Permit for storm water discharges to waters of the United States is a violation of the CWA and the California Water Code. The LRP must electronically submit the PRDs, which include an NOI, Storm Water Pollution Prevention Plan (SWPPP), and other documents required by this General Permit, if applicable, and mail the appropriate filing fee to the State Water Resources Control Board (State Water Board) before starting construction activities. PRDs must be filed through the State Water Board's Storm Water Multi-Application and Report Tracking System (SMARTS).

Upon receipt of the appropriate PRDs, Lahontan Water Board staff has 30 days to review the documents for completeness. If determined to be incomplete, a notice will be provided to the applicant with the reasons why the determination was made. Upon approval, a written Notice of Applicability (NOA) and WDID will be generated in the SMARTS.

### **D. General Permit Coverage**

This Order serves as a general NPDES Permit for discharges of storm water to surface waters and authorized non-storm water discharges to land associated with construction activity that results in land disturbances equal to or greater than one acre in the Lake Tahoe Hydrologic Unit,

1. Activities covered under this General Permit include:

- a.** Any construction or demolition activity, including, but not limited to clearing, grading, grubbing, or excavation, or any other activity that results in land disturbance of equal to or greater than one acre.
  - b.** Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale that disturbs one or more acres.
  - c.** Construction activity that results in land disturbance of equal to or greater than one acre related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.
  - d.** Construction activity that results in land disturbance of equal to or greater than one acre associated with linear underground/overhead utility projects including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.
  - e.** Discharges of sediment from construction activities that results in land disturbance of equal to or greater than one acre associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.<sup>1</sup>
- 2.** Activities specifically not covered under this General Permit include:
  - a.** Disturbance to land of municipal facilities under an approved Storm Water Management Program for routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.
  - b.** Disturbances to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.

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<sup>1</sup> Pursuant to the Ninth Circuit Court of Appeals' decision in NRDC v. EPA (9th Cir. 2008) 526 F.3d 591, and subsequent denial of the USEPA's petition for reconsideration in November 2008, oil and gas construction activities discharging storm water contaminated only with sediment are no longer exempt from the NPDES program.

- c. Discharges of storm water from areas on tribal lands; construction on tribal lands is regulated by a federal permit.
- d. Construction activity that disturbs less than one acre of land surface, and that is not part of a larger common plan of development or the sale of one or more acres of disturbed land surface.
- e. Construction activity covered by an individual NPDES Permit for storm water discharges.
- f. Discharges of storm water identified in section 402(l)(2) of the CWA, 33 USC section 1342(l)(2).

#### **E. Permit Termination Requirements**

To terminate coverage, Dischargers must file a Notice of Termination (NOT) request, final site map, and site photographs through the SMARTS when construction is complete and final stabilization has been reached or when ownership has been transferred. The Discharger must demonstrate that the site is stabilized and does not pose any additional sediment discharge risk than the pre-construction conditions. This may be accomplished using the Revised Universal Soil Loss Equation (RUSLE) or RUSLE2 or other custom methods that account for the physical characteristics (soil and cover conditions) of the site. The purpose of this requirement is to better quantify site stabilization requirements and set measurable benchmarks for project close-out.

The Discharger must certify that all State and local requirements have been met in accordance with this General Permit and demonstrate compliance with the stabilization and post-construction standards set forth in this General Permit. The Discharger is responsible for all compliance issues including all annual fees until the NOT has been filed and approved by the Lahontan Water Board.

Upon approval, a written termination notice will be transmitted to the Discharger. If revocation of coverage under the General Permit is denied, Lahontan Water Board staff shall describe the reasons for denial in a written notification.

### **III. DISCHARGE PROHIBITIONS**

This General Permit implements the waste discharge prohibitions contained in the Basin Plan. Unless granted an exemption in accordance with the Basin Plan, all discharges to surface waters other than storm water are prohibited. The Lahontan Water Board recognizes that certain non-storm water discharges may be necessary for the completion of construction projects. Authorized non-storm water discharges to land may include those from potable water sources such as: fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, and uncontaminated ground water dewatering. Certain authorized non-

storm water discharges to surface waters may be eligible for an exemption if the project meets the requirements for a restoration project or criteria specified in Attachment F of this General Permit (exemptions for 100-year floodplains and stream environment zones). To be valid, exemptions to applicable waste discharge prohibitions must be granted in writing (e.g., in a NOA).

Non-storm water discharges may include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Non-storm water discharges may contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural as well as non-structural BMPs.

#### **IV. EFFLUENT LIMITATIONS**

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR section 122.44 requires that industrial non-municipal discharges that contain non-conventional and/or toxic pollutants regulated under the NPDES permit program comply with technology-based effluent limits. Both technology-based and WQBELs must be considered, and more stringent WQBELs must be developed if the technology-based effluent limits are not sufficient to meet water quality objectives. WQBELs for discharges authorized by this General Permit were developed to ensure protection of the beneficial uses of receiving waters in the Basin Plan.

##### **A. Technology-Based Effluent Limitations**

The CWA requires technology-based effluent limitations to be established based on several levels of controls:

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.



- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in section 125.3.

On December 1, 2009 the USEPA published final regulations establishing technology-based ELGs and NSPS for the Construction and Development point source category. 40 CFR Part 450 establishes technology-based effluent limitations based BPT, BAT, BCT, and NSPS. For BPT and BCT, the ELGs establish requirements for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and outlet requirements. For BAT and NSPS, the ELGs require all dischargers disturbing 20 or more acres of land at one time, achieve a daily maximum turbidity of 280 NTU for all discharges by August 2, 2010. By February 2, 2014, the turbidity ELG will apply to construction sites involving land disturbance of 10 acres or more. In addition, BAT and NSPS include the same requirements for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and surface outlets as BPT and BCT.

Table 5.6-1 of the Basin Plan establishes effluent limitations for discharges of storm water to surface waters and municipal separate storm sewer systems, or MS4s, which are termed “collection” systems in the Basin Plan. Order No. R6T-2005-0007 established effluent limitations, consistent with Table 5.6-1 of the

Basin Plan for discharges to land treatment systems, collection systems and surface water. Effluent limitations contained in Table 5.6-1 of the Basin Plan, and established in Order No. R6T-2005-0007, are summarized below:

**Table FS-1. Basin Plan Storm Water Effluent Limitations**

| Parameter               | Units | Maximum Concentration for Discharge to: |                                       |
|-------------------------|-------|---|---------------------------------------|
|                         |       | Land Treatment Systems                  | Collection Systems and Surface Waters |
| Total Nitrogen (as N)   | mg/L  | 5                                       | 0.5                                   |
| Total Phosphorus (as P) | mg/L  | 1                                       | 0.1                                   |
| Total Iron              | mg/L  | 4                                       | 0.5                                   |
| Turbidity               | NTU   | 200                                     | 20                                    |
| Grease and Oil          | mg/L  | 40                                      | 2.0                                   |

Section 5.6 of the Basin Plan states:

*“The effluent limitations at the top of Table 5.6-1 apply to storm water discharges to surface waters, and generally to surface runoff leaving a specific project site. If surface runoff enters a project site from upgradient, its quality and volume may together with the quality and volume of runoff generated onsite, affect the quality of the storm water leaving the site. Lahontan Water Board storm water permits for sites where offsite storm water enters the property will take these effects into consideration. In general, where the quality of runoff entering the site is worse than that of runoff generated on site, there should be no statistically significant increase (at a 90 percent confidence level) in pollutants in the water discharged from the site.”*

## 1. Numeric Effluent Limitations (NELs)

The Lahontan Water Board has determined that the application of effluent limitations to land treatment systems is not appropriate for the discharge of storm water from construction activities. Due to the connectivity of storm drains and surface waters in the Lake Tahoe Hydrologic Unit, discharges from the project boundaries must meet the more stringent effluent limitations for discharges to municipal separate storm sewer systems or surface waters where effluent is discharged from the project boundaries or into surface waters, including municipal separate storm sewer systems. The NELs for discharges to surface waters implement requirements imposed under the previous permit.

Effluent limitations for land treatment systems established in a General Permit for Construction Activities are inappropriate. The effluent limitations contained in Table 5.6-1 for discharges to land treatment systems are established to ensure that the waters infiltrated into soils do not contain excessive nutrient concentrations that may not be effectively filtered out by soils and vegetation. However, these effluent limitations do not consider the

treatment efficiency or capacity of the various types of land treatment systems that may be used by dischargers under the General Permit.

Land treatment is an effective method for removing particulate nutrients and fine sediment and under some circumstances may eliminate a discharge to surface waters. Effluent limitations to land treatment systems may unduly restrict the ability of dischargers to treat runoff by this method. Removing effluent limitations to land treatment systems and focusing on effluent limitations applied at the point of discharge, is considered more effective and is consistent with State and federal anti-backsliding requirements.

The numeric effluent limitations contained in Table 5.6-1 are more stringent than those established in the federal ELGs (turbidity). Thus, numeric effluent limitations based on Table 5.6-1 of the Basin Plan have been established in the General Permit as follows:

**Table FS-2. Numeric Effluent Limitations**

| Parameter               | Units | Maximum Daily Effluent Limitations For Discharge To Surface Waters |
|-------------------------|-------|--|
| Total Nitrogen (as N)   | mg/L  | 0.5  |
| Total Phosphorus (as P) | mg/L  | 0.1  |
| Total Iron              | mg/L  | 0.5  |
| Turbidity               | NTU   | 20   |
| Grease and Oil          | mg/L  | 2  |

Additionally, numeric benchmark levels for pH have been established because construction activities often involve materials, such as concrete, grout, and etching acids, which can affect the pH of runoff. The benchmark action level applies to pH levels not within the range between 6.0 and 9.0. Based on previous data collected and other anecdotal evidence, the Water Board recognizes that pH level in storm water runoff may fluctuate naturally depending on site characteristics. Therefore, dischargers are required to sample for pH when site conditions have the potential to affect pH. If the results do not meet the benchmark range levels, dischargers are required to investigate the cause of the pH excursion and implement corrective actions as needed. This action level is expected to protect receiving waters from changes in pH by more than 0.5, which is the receiving water objective for pH in the Lake Tahoe Hydrologic Unit.

## **2. Compliance Storm Event**

This General Permit contains “compliance storm event” exceptions from the technology-based turbidity NEL similar to the Statewide General Permit. The rationale is that technology-based requirements are developed assuming a certain design storm (defined as the storm producing a rainfall amount for a specified BMPs capacity). Compliance thresholds are needed for storm events above and beyond the design storms assumed to determine the technology-based NELs. This General Permit establishes a compliance storm event as the equivalent rainfall in a 20-year, 1-hour storm, which is 1 inch of rainfall in a 1-hour period. This compliance storm event was chosen because it is consistent with the Basin Plan and other policies for pre- and post-construction BMP requirements.

## **3. Best Management Practices**

Construction activity may result in the discharge of pollutants to receiving waters through storm water runoff and additional dry weather flows. These discharges can be minimized through best management practices and other pollution prevention measure that reduce dry weather discharges, reduce erosion, retain sediment, and minimize contact of materials with storm water.

Consistent with 40 CFR 122.44(k)(4), Order No. R6T-2005-0007 established BMPs and the requirement to develop and implement a SWPPP. This General Permit carries over the requirements to implement BMPs and a SWPPP. Additional BMPs have been established in the General Permit to be consistent with the requirements found in 40 CFR 450 for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and surface outlets.

This General Permit also establishes requirements for a Rain Event Action Plan (REAP), which establishes requirements to protect all exposed portions of sites within 24 hours prior to any likely precipitation event. The requirements for the REAP have been modified and established after considering the requirements of the Statewide General Permit.

## **B. Water Quality-Based Effluent Limitations (WQBELs)**

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard,

including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies.

## **1. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

Beneficial uses of surface waters within the Lake Tahoe Hydrologic Unit include MUN, AGR, GWR, FRSH, REC-1, REC-2, COLD, SPWN, COMM, WILD, WQE, FLD, NAV, BIOL, RARE, and MIGR.

The Basin Plan includes both narrative and numeric water quality objectives applicable to receiving waters in the Lake Tahoe Hydrologic Unit. In addition, priority pollutant water quality criteria in the California Toxic Rule (CTR) are applicable to receiving waters in the Lake Tahoe Hydrologic Unit.

## **2. Determining the Need for WQBELs**

Typical pollutants expected in discharges of storm water runoff from construction activities include nutrients, sediments, and petroleum products. As discussed above, Chapter 5.6 of the Basin Plan establishes effluent limitations to be implemented in storm water permits for total nitrogen, total phosphate (as total phosphorus), total iron, turbidity, and grease and oil. These parameters serve as indicator parameters to ensure water quality standards for biostimulatory substances, clarity, oil and grease, sediment, settleable materials, suspended materials, suspended sediment, transparency, and turbidity are not exceeded in the receiving water. Order No. R6T-2005-0007 established effluent limitations for total nitrogen, total phosphate (as total phosphorus), total iron, turbidity, and grease and oil based on the requirements of Chapter 5.6 of the Basin Plan. These effluent limitations have been carried over and serve as both water quality-based effluent limitations as well as technology-based effluent limitations.

Table 5.1-3 (summarized in Attachment G) of the Basin Plan establishes water quality objectives for total nitrogen, total phosphorus, and total iron for some water bodies that may be more stringent than the effluent limitations

established in Section 5.6 of the Basin Plan. In addition, Table 5.1-3 establishes effluent limitations for boron, chloride, sulfate, and total dissolved solids that are applicable to certain water bodies in the Lake Tahoe Hydrologic Unit. Order No. R6T-2005-0007 established the water quality objectives in Table 5.1-3 as receiving water limitations. The Lahontan Water Board found that the effluent limitations established in Section 5.6 of the Basin Plan, and receiving water limitations based on the water quality objectives established on Table 5.1-3 of the Basin Plan were protective of water quality. As such, this General Permit carries over these receiving water limitations.

Due to the presence of portable sanitation devices (porta-potties), the synergistic effects of unknown pollutants in storm water runoff, and the potential presence of toxic materials at construction sites, both bacteria and toxicity are pollutants of concern. Consistent with the water quality standards established in Section 5.1 of the Basin Plan for toxicity and coliform, Order No. R6T-2005-0007 established the narrative effluent limitation:

*“All surface flows generated within the project area, or as a results of the development of the project, which are discharged to surface waters or municipal storm water collection systems shall not contain the following:*

- i. Substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or animal life; and*
- ii. Coliform organisms attributable to human wastes.”*

The narrative effluent limitation for toxicity and coliform organisms has been carried over.

Section 5.6 of the Basin Plan requires storm water permits issued by the Lahontan Water Board to take into consideration the quality of run-on from offsite areas. Order No. R6T-2005-0007 required that if pollutant concentrations of waters entering the project area exceed the numerical limitations specified above there shall be no increase in the constituent concentrations in the waters that are discharged from the project area. Consistent with section 5.6 of the Basin Plan, this requirement has been carried over.

### **C. Satisfaction of Anti-Backsliding Requirements**

Sections 402(0)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(1) prohibit backsliding in NPDES permits. These anti-backsliding

provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R6T-2005-0007.

#### **D. Satisfaction of Antidegradation Policy**

40 CFR Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where, the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Lahontan Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

This General Permit is no less stringent than Order No. R6T-2005-0007 and does not extend the coverage of the General Permit beyond the types of dischargers previously authorized to discharge under Order No. R6T-2005-0007. The Lahontan Water Board has considered antidegradation pursuant to 40 CFR 131.12 and State Water Board Resolution No. 68-16 and finds that the subject discharges are consistent with the provisions of these policies. An antidegradation analysis is not necessary for this General Permit. Discharges not consistent with the provisions of these policies and regulations are not covered by this General Permit.

#### **E. Stringency of Requirements for Individual Pollutants**

This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on total nitrogen, total phosphorus, total iron, turbidity, and grease and oil. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

1. All surface flows generated within the project site that discharge to surface waters or municipal storm sewer collection systems shall not contain constituents in excess of the following concentrations:

**Table FS-3. Summary of Final Effluent Limitations**

| Parameter               | Units | Maximum Daily Effluent Limitations For Discharge To Surface Waters |
|-------------------------|-------|--|
| Total Nitrogen (as N)   | mg/L  | 0.5  |
| Total Phosphorus (as P) | mg/L  | 0.1  |

| Parameter   | Units | Maximum Daily Effluent Limitations For Discharge To Surface Waters |
|---|-------|--|
| Total Iron  | mg/L  | 0.5  |
| Turbidity   | NTU   | 20*  |
| Grease and Oil  | mg/L  | 2  |
| Note* - For ATS: 10 NTU for daily flow-weighted average and 20 NTU for any single sample. |       |  |

2. If constituent concentrations of waters entering the project area exceed the numerical limitations specified above, there shall be no increase in the constituent concentrations in the waters that are discharged from the project area.
3. All surface flows generated within the project area, or as a result of the development of the project that are discharged to surface waters or municipal storm water collection systems shall not contain the following:
  - a. Substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or animal life; and
  - b. Coliform organisms attributable to human wastes.

## V. RECEIVING WATER LIMITATIONS

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Lahontan Region as well as site-specific objectives for certain waters within the Lake Tahoe Hydrologic Unit. The Basin Plan also includes an objective to maintain the high quality waters pursuant to federal regulations (40 CFR 131.12) and State Water Board Resolution No. 68-16 (Anti-Degradation Policy). Surface water limitations in this General Permit are included to ensure protection of background water quality and beneficial uses of the receiving water.

## VI. TRAINING QUALIFICATIONS AND CERTIFICATION

USEPA suggests that qualified personnel prepare SWPPPs and points to numerous states that require certified professionals to be on construction sites at all times. States that currently have certification programs are California, Washington, Georgia, Florida, Delaware, Maryland, and New Jersey. Order No. R6T-2005-0007 requires that personnel implementing the Storm Water Pollution Prevention Plan (SWPPP) be trained on the appropriate procedures. However, it does not specify any training criteria for SWPPP developers nor is there a specific curriculum or certification program required by the Order. This has resulted in inconsistent implementation by all affected parties - the dischargers, the local governments



where the construction activity occurs, and the regulators enforcing Order No. R6T 2005-0007.

This General Permit requires that all SWPPPs be written, amended, and certified by a Qualified SWPPP Developer (QSD) and that a Qualified SWPPP Practitioner (QSP) is responsible for implementing the SWPPP. A QSD must possess one of the certifications and or registrations specified in this General Permit. A QSP must possess one of the certifications and or registrations specified in this General Permit by **April 13, 2012**. Table FS-4 provides an overview of the criteria used in determining qualified certification titles for a QSD and QSP.

Additionally, the QSD/P, effective **April 13, 2012**, must have attended a State Water Board-sponsored or approved Qualified SWPPP Developer training course and pass the associated examination. The State Water Board has entered into a Memorandum of Understanding with the California Stormwater Quality Association (CASQA) to implement the training and certification program. Specific information on training and educational classes is accessible at:

<http://www.casqa.org/TrainingandEducation/tabid/201/Default.aspx>.

**Table FS-4. Qualified SWPPP Developer/ Qualified SWPPP Practitioner Certification Criteria**

| <b>Certification/ Title</b>                                     | <b>Registered By</b>   | <b>QSD/QSP</b> | <b>Certification Criteria</b>   |
|---|--|----------------|---|
| Professional Civil Engineer                                     | California   | Both           | 1. Approval Process<br>2. Code of Ethics<br>3. Accountability<br>4. Pre-requisites                            |
| Professional Geologist or Engineering Geologist                 | California   | Both           | 1. Approval Process<br>2. Code of Ethics<br>3. Accountability<br>4. Pre-requisites                            |
| Landscape Architect   | California   | Both           | 1. Approval Process<br>2. Code of Ethics<br>3. Accountability<br>4. Pre-requisites                            |
| Professional Hydrologist  | American Institute of Hydrology  | Both           | 1. Approval Process<br>2. Code of Ethics<br>3. Accountability<br>4. Pre-requisites                            |
| Certified Professional in Erosion and Sediment Control™ (CPESC) | Enviro Cert International Inc.   | Both           | 1. Approval Process<br>2. Code of Ethics<br>3. Accountability<br>4. Pre-requisites<br>5. Continuing Education |
| Certified Inspector of Sediment and Erosion Control™ (CISEC)    | Certified Inspector of Sediment and Erosion Control, Inc.                | QSP            | 1. Approval Process<br>2. Code of Ethics<br>3. Accountability<br>4. Pre-requisites<br>5. Continuing Education |
| Certified Erosion, Sediment and Storm Water Inspector™ (CESSWI) | Enviro Cert International Inc.   | QSP            | 1. Approval Process<br>2. Code of Ethics<br>3. Accountability<br>4. Pre-requisites<br>5. Continuing Education |
| Certified Professional in Storm Water Quality™ (CPSWQ)          | Enviro Cert International Inc.   | Both           | 1. Approval Process<br>2. Code of Ethics<br>3. Accountability<br>4. Pre-requisites<br>5. Continuing Education |
| Professional in Erosion and Sediment Control                    | National Institute for Certification in Engineering Technologies (NICET) | Both           | 1. Approval Process<br>2. Code of Ethics<br>3. Accountability<br>4. Pre-requisites                            |

## **VII. BEST MANAGEMENT PRACTICES**

Consistent with 40 CFR 122.44(k)(4), dischargers are required to implement specific BMPs to control or abate the discharge of pollutants that are likely to be present in storm water runoff from construction sites. In addition, 40 CFR 122.45 establishes BMP requirements for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and surface outlets as BPT and BCT. This General Permit establishes minimum BMPs to be implemented by dischargers, based on Order No. R6T-2005-0007, the Statewide General Permit, and the requirements of 40 CFR 122.45.

### **A. Site Management**

Proper handling and managing of construction materials and controlling the limits of land disturbing activities can help minimize threats to water quality. The discharger must consider appropriate site management measures for construction materials and other potential pollutant sources, waste management, vehicle storage and maintenance, landscape materials, vehicle access routes, and construction limits.

### **B. Sediment and Erosion Control**

Sediment control BMPs should be used in combination with erosion controls as a means of preventing storm water contamination. The discharger is required to consider perimeter control measures such as installing silt fences or placing straw wattles below slopes, installing drain inlet protection, installing temporary check dams in flow lines, and constructing sediment basins to capture and treat runoff.

The best way to minimize the risk of creating pollution problems during construction is to prevent erosion at the source. The discharger is required to implement effective erosion control measures in combination with appropriate sediment control measures such as preserving existing vegetation where feasible, limiting disturbance, and stabilizing and re-vegetating disturbed areas as soon as possible after grading or construction activities. Particular attention must be paid to large, mass-graded sites where the potential for soil exposure to the erosive effects of rainfall and wind is great and where there is potential for significant sediment discharge from the site to surface waters. Until permanent vegetation is established, temporary soil stabilization is the most cost-effective and expeditious method to protect soil particles from detachment and transport by rainfall. The discharger is required to consider measures such as covering disturbed areas with mulch, applying temporary seeding, and using soil stabilizers, binders, or blankets. These erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed.

Inappropriate management of run-on and runoff can increase erosion and result in excessive physical impacts to receiving waters from sediment and increased flows. The discharger is required to manage all run-on and runoff from a project site. Examples include installing berms, gravel bags, or other temporary run-on and runoff diversions, and providing outlet protection at discharge points.

### **C. Non-Storm Water Management**

Non-storm water discharges directly connected to receiving waters or the storm drain system have the potential to negatively impact water quality and are prohibited unless a prohibition exemption is granted in writing. The discharger must implement measures to control all non-storm water discharges to land during construction that are conditionally allowed under the terms of this General Permit. Examples include; properly washing vehicles in contained areas, controlling water applications when cleaning streets, and minimizing irrigation runoff. Control measures must be described in the SWPPP.

### **D. Dewatering**

The discharge of dewatering waste to surface waters is allowed only when alternative options have been considered and deemed infeasible. When dewatering waste must be discharged to surface waters, a site-specific dewatering plan shall be prepared and accepted by the Lahontan Water Board before the discharge may commence. The plan shall be incorporated into the project SWPPP. In certain areas, a Basin Plan prohibition exemption may be required.

### **E. Inspection, Maintenance, and Repair**

All management measures must be periodically inspected, maintained and repaired to ensure that receiving water quality is protected. Frequent inspections coupled with thorough documentation and timely repair is required by the General Permit.

### **F. Rain Event Action Plan**

A Rain Event Action Plan (REAP) is a written document, specific for each rain event, that when implemented, protects all exposed portions of the site. A suggested REAP template is provided in Attachment H. The REAP requirement is designed to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures before the storm event occurs. A REAP shall be developed at least 24 hours before the day a forecast of 30 percent or greater probability of precipitation is predicted in the project area. This requirement differs from the requirements established in the

Statewide General Permit due to the nature of summer thunderstorms that typically occur in the Lake Tahoe Basin. Dischargers shall consult the National Oceanic and Atmospheric Administration (NOAA) website to determine the probability of predicted rain events in the project area. The website link is: <http://www.srh.noaa.gov/forecast>. Dischargers should be prepared to respond rapidly during periods when thunderstorm activity is predicted and monitor weather conditions for impending thunderstorms that may be localized in the project area.

## **G. Active Treatment System (ATS<sup>2</sup>) Requirements**

Requirements in this General Permit for the use of an ATS is identical to the requirements established in the Statewide General Permit. There are instances on construction sites where traditional erosion and sediment controls do not effectively control accelerated erosion. Under such circumstances, or under circumstances where storm water discharges leaving the site may cause or contribute to an exceedance of a water quality standard, the use of an ATS may be necessary. Additionally, it may be appropriate to use an ATS when site constraints inhibit the ability to construct a correctly sized sediment basin, when clay and/or highly erosive soils are present, or when the site has very steep or long slope lengths.<sup>3</sup>

Although treatment systems have been in use in some form since the mid-1990s, the ATS industry in California is relatively young, and detailed regulatory standards have not yet been developed. Many developers are using these systems to treat storm water discharges from their construction sites and there are a number of reasons why an ATS may be necessary. The new ATS requirements set forth in this General Permit are based on those in place for small wastewater treatment systems, ATS regulations from the Central Valley Regional Water Quality Control Board (September 2005 memorandum “2005/2006 Rainy Season – Monitoring Requirements for Storm Water Treatment Systems that Utilize Chemical Additives to Enhance Sedimentation”), the Construction Storm Water Program at the State of Washington’s Department of Ecology, as well as recent advances in technology and knowledge of coagulant performance and aquatic safety. The effective design of an ATS requires a detailed survey and analysis of site conditions. With proper planning, ATS performance can provide exceptional water quality discharge and prevent significant impacts to surface water quality, even under extreme environmental conditions.

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<sup>2</sup> An ATS is a treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation in order to reduce turbidity caused by fine suspended sediment

<sup>3</sup> Pitt, R., S. Clark, and D. Lake. 2006. Construction Site Erosion and Sediment Controls: Planning, Design, and Performance. DEStech Publications. Lancaster, PA. 370pp.

These systems can be very effective in reducing the sediment in storm water runoff, but the systems that use additives/polymers to enhance sedimentation also pose a potential risk to water quality (e.g., operational failure, equipment failure, additive/polymer release, etc.). The State and Lahontan Water Boards are concerned about the potential acute and chronic impacts that the polymers and other chemical additives may have on fish and aquatic organisms if released in sufficient quantities or concentrations. In addition to anecdotal evidence of polymer releases causing aquatic toxicity in California, the literature supports this concern.<sup>4</sup> For example, cationic polymers have been shown to bind with the negatively charged gills of fish, resulting in mechanical suffocation.<sup>5</sup> Due to the potential toxicity impacts, which may be caused by the release of additives/polymers into receiving waters, this General Permit establishes residual polymer monitoring and toxicity testing requirements for discharges from construction sites that utilize an ATS.

The primary treatment process in an ATS is coagulation/flocculation. ATSs operate on the principle that the added coagulant is bound to suspended sediment, forming floc, which is gravitationally settled in tanks or a basin, or removed by sand filters. A typical installation utilizes an injection pump upstream from the clarifier tank, basin, or sand filters, which is electronically metered to both flow rate and suspended solids level of the influent, assuring a constant dose. The coagulant mixes and reacts with the influent, forming a dense floc. The floc may be removed by gravitational setting in a clarifier tank or basin, or by filtration. Water from the clarifier tank, basin, or sand filters may be routed through cartridge(s) and/or bag filters for final polishing. Vendor-specific systems use various methods of dose control, sediment/floc removal, filtration, etc., that are detailed in project-specific documentation. The particular coagulant/flocculant to be used for a given project is determined based on the water chemistry of the site because the coagulants are specific in their reactions with various types of sediments. Appropriate selection of dosage must be carefully matched to the characteristics of each site.

ATSs are operated in two differing modes, either Batch or Flow-Through. Batch treatment can be defined as Pump-Treat-Hold-Test-Release. In Batch treatment, water is held in a basin or tank, and is not discharged until treatment is complete. Batch treatment involves holding or recirculating the treated water in a holding basin or tank(s) until treatment is complete or the basin or storage tank(s) is full. In Flow-Through treatment, water is pumped into the ATS directly from the runoff collection system or storm water holding pond, where it is treated and filtered as

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<sup>4</sup> RomØen, K., B. Thu, and Ø. Evensen. 2002. Immersion delivery of plasmid DNA II. A study of the potentials of a chitosan based delivery system in rainbow trout (*Oncorhynchus mykiss*) fry. *Journal of Controlled Release* **85**: 215-225.

<sup>5</sup> Bullock, G., V. Blazer, S. Tsukuda, and S. Summerfelt. 2000. Toxicity of acidified chitosan for cultured rainbow trout (*Oncorhynchus mykiss*). *Aquaculture* **185**:273-280.

it flows through the system, and is then directly discharged. “Flow-Through Treatment” is also referred to as Continuous treatment.”

## **1. Effluent Standards**

This General Permit establishes NELs for discharges from construction sites that utilize an ATS. These systems lend themselves to NELs for turbidity and pH because of their known reliable treatment. Advanced systems have been in use in some form since the mid-1990s. ATSs are considered reliable, can consistently produce a discharge of less than 10 NTU, and have been used successfully at many sites in several states since 1995 to reduce turbidity to very low levels.<sup>6</sup>

This General Permit contains “compliance storm event” exceptions from the technology-based NELs for ATS discharges. The rationale is that technology-based requirements are developed assuming a certain design storm. For consistency with the compliance storm event for BMP performance in this General Permit, the compliance storm event for ATS use is 1 inch of rain in a 1-hour period (20-year, 1-hour storm).

## **2. Training**

Operator training is critical to the safe and efficient operation and maintenance of the ATS, and to ensure that all State Water Board monitoring and sampling requirements are met. The General Permit requires that all ATS operators have training specific to using ATS liquid coagulants.

## **H. Post-Construction Standards**

Post-construction standards in this General Permit are focused on reducing fine sediment and nutrient loading to Lake Tahoe and are consistent with requirements being developed under the Lake Tahoe Total Maximum Daily Load (TMDL) program. For municipal and public roadway storm water treatment facilities, each municipal jurisdiction and state highway departments must meet the requirements set forth in its respective municipal NPDES storm water permit.

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<sup>6</sup> Currier, B., G. Minton, R. Pitt, L. Roesner, K. Schiff, M. Stenstrom, E. Strassler, and E. Strecker. 2006. The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities.

For new development, re-development, and existing development BMP retrofit projects, dischargers shall consider opportunities to infiltrate stormwater runoff from impervious surfaces. At a minimum, permanent stormwater infiltration facilities must be designed and constructed to infiltrate runoff generated by the 20 year, 1-hour storm, which equates to approximately one inch of runoff over all impervious surfaces during a 1-hour period, or must meet the alternative requirements described below. Where conditions permit, project proponents should consider designing infiltration facilities to accommodate runoff volumes in excess of the 20 year, 1-hour storm to provide additional stormwater treatment.

Infiltrating runoff volumes generated by the 20-year, 1-hour storm may not be possible in some locations due to shallow depth to seasonal groundwater levels, unfavorable soil conditions, or other site constraints such as existing infrastructure or rock outcroppings. In the event that site conditions do not provide opportunities to infiltrate the runoff volume generated by a 20 year, 1-hour storm, project proponents must either (1) provide information showing how treatment facilities are expected to meet the numeric effluent limits in the Basin Plan, or (2) document written acceptance by the local municipality or state highway department that shared stormwater treatment facilities treating private property discharges and public right-of-way stormwater are sufficient to meet the municipality's average annual fine sediment and nutrient load reduction requirements.

Runoff from parking lots, retail and commercial fueling stations, and other similar land uses may contain oil, grease, and other hydrocarbon pollutants. Project proponents designing treatment facilities for these areas must include pre-treatment devices to remove hydrocarbon pollutants prior to infiltration or discharge and contingency plans to prevent spills from polluting groundwater.

## **VIII. STORM WATER POLLUTION PREVENTION PLAN**

This General Permit establishes requirements for the development and implementation of a SWPPP to identify the sources of sediment and other pollutants that affect the quality of storm water discharges; and to describe and ensure the implementation of BMPs to minimize or eliminate sediment and other pollutants in storm water and non-storm water discharges. The conditions of SWPPP are based on previous requirements in Order No. R6T-2005-0007 and the Statewide General Permit.

This General Permit provides more detailed requirements for the content and organization of SWPPPs to be developed. A suggested outline for the SWPPP is also presented in Attachment I.



## **IX. MONITORING AND REPORTING PROGRAM REQUIREMENTS**

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Lahontan Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment C of this General Permit, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

### **A. Visual Inspections**

To ensure the proper implementation of BMPs and the SWPPP, and record site conditions for use in compliance determination, visual inspections of the site are required at the end of each work day during active construction periods, and at least once a month during long periods of inactivity such as the winter shut-down period. Results of inspections must be documented and maintained with the project SWPPP.

### **B. Storm Water Discharge Monitoring**

Pursuant to the requirements of 40 CFR 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations and to assess the impacts of the discharge on the receiving water. Sampling shall be conducted at all identified discharge points in accordance with the requirements of the MRP. The MRP requires daily sampling and analysis of storm water discharge events for turbidity using calibrated portable field meters to evaluate potential impacts from land-disturbing activities.

This General Permit also requires that all dischargers develop a sampling and analysis strategy for monitoring pollutants that are not visually detectable in storm water. The sampling strategy shall be developed based on the potential pollutants to be present considering the construction materials, soil amendments, soil treatments, and historic contamination at the site. Monitoring for non-visible pollutants is required at any construction site when the exposure of construction materials occurs and where a discharge can cause or contribute to an exceedance of a water quality objective. Examples of non-visible pollutants include glyphosate (herbicides), diazinon and chlorpyrifos (pesticides), nutrients (fertilizers), and molybdenum (lubricants). The use of diazinon and chlorpyrifos is a common practice among landscaping professionals and may trigger sampling and analysis requirements if these materials come into contact with storm water. High pH values from cement and gypsum, high pH and suspended sediment concentrations from wash waters, and chemical/fecal contamination from portable toilets are also potential pollutants from construction projects.

The pH of effluent should be between 6.0 and 9.0 to ensure protection of water quality objectives set for receiving waters. This pH range is set as a numeric benchmark level that requires dischargers to investigate the cause of any excursion outside of the 6.0-9.0 pH range. The Lahontan Water Board recognizes that, in some cases, pH levels in storm water runoff may occur at levels outside of the range due to natural conditions. In these cases, dischargers must provide data to demonstrate that an excursion is due to natural conditions.

The most effective way to avoid the sampling and analysis requirements, and to ensure permit compliance, is to avoid the exposure of construction materials to precipitation and storm water runoff by implementing appropriate BMPs. However, preventing or eliminating the exposure of pollutants at construction sites is not always possible. Some materials, such as soil amendments, are designed to be used in a manner that will result in exposure to storm water. In these cases, it is important to make sure that these materials are applied according to the manufacturer's instructions and at a time when they are unlikely to be washed away.

Other construction materials can be exposed when storage, waste disposal or the application of the material is done in a manner not protective of water quality. For these situations, sampling is required unless there is capture and containment of all storm water that has been exposed. In cases where construction materials may be exposed to storm water, but the storm water is contained and is not allowed to run off the site, sampling will only be required when inspections show that the containment failed or is breached, resulting in potential exposure or discharge to receiving waters.

## **C. Receiving Water Monitoring**

### **1. Surface Water**

The storm water discharge sampling requirements and NELs in this General Permit are sufficiently stringent such that surface water (also called receiving water) monitoring is not necessary in most situations. The storm water monitoring requirements specified above provide the most direct opportunity for dischargers to assess site conditions and take corrective actions as necessary. The stringency of the NELs also provides a sufficient enforcement mechanism to ensure that water quality is protected. Additionally, most storm water discharges are commingled with effluent from a variety of sources before discharging to surface waters. These conditions complicate analysis of the results and make it difficult to determine the cause of any potential effects on surface water quality. Therefore, this General Permit requires surface water sampling only in certain cases when stormwater discharge sampling is infeasible and there is a direct discharge to

surface waters from overland flow. These conditions are most often encountered on stream restoration projects where grading activities are located immediately adjacent to the surface water. In these cases, the discharger is required to collect surface water samples up and downstream of the project site.

## **2. Bioassessments**

This General Permit requires a bioassessment of receiving waters for dischargers with construction projects equal to or larger than 30 acres with direct discharges into wadeable streams. Benthic macroinvertebrate samples shall be taken upstream and downstream of the site's discharge points in the receiving water. Bioassessments measure the quality of the stream by analyzing the aquatic life present. Higher levels of appropriate aquatic species tend to indicate a healthy stream; whereas low levels of organisms can indicate stream degradation.

Active construction sites have the potential to discharge large amounts of sediment and pollutants into receiving waters. Requiring a bioassessment for large project sites, with the most potential to impact water quality, provides data regarding the health of the receiving water prior to the initiation of construction activities. Pre- and post-construction data can be used to compare the effects of the construction activity on the receiving water.

Specific requirements of bioassessments are established in Attachment C-1 and have been developed to be consistent with the requirements of the Statewide General Permit. Each ecoregion (biologically and geographically related area) in the State has a specific yearly peak time where stream biota is in a stable and abundant state. This time of year is called an Index Period and is from July 1 through August 15 in the Lake Tahoe Hydrologic Unit. The bioassessment requirements specify that benthic macroinvertebrate sampling be conducted within this index period. If pre-construction bioassessment cannot be completed within the index period, the discharger shall pay into the Surface Water Ambient Monitoring Program (SWAMP) bank account in accordance with Appendix 3 of Water Quality Order No. 2009-0009-DWQ. Bioassessment methods are required to be in accordance with the SWAMP in order to provide data consistency within the state as well as generate useable biological stream data.

## **D. Reporting Requirements**

### **1. 24-Hour Reporting**

Pursuant to the requirements of 40 CFR 122.41(l)(6), this General Permit requires dischargers to orally report to Lahontan Water Board staff within 24

hours whenever an adverse condition occurs as a result of this discharge. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this General Permit, significant spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance pursuant to section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Lahontan Water Board within five (5) business days of occurrence. The written notification shall identify the adverse conditions, describe the actions necessary to remedy the condition and/or the actions implemented to abate the problem from continuing, and specify a timetable, subject to the modifications of the Lahontan Water Board, for remedial actions.

In the event that sampling results exceed any applicable NEL, the dischargers shall orally notify the Lahontan Water Board within 24 hours after the NEL exceedance has been identified and electronically submit all storm event sampling results through the SMARTS within five (5) business days after the NEL exceedance has been identified

## **2. Annual Report**

All dischargers must prepare and electronically submit an Annual Report no later than November 30 of each year using the Storm water Multi-Application Reporting and Tracking System (SMARTS). The report shall cover the period from October 16 of the previous year through October 15 of the current year. The Annual Report must include a summary and evaluation of all sampling and analysis results, original laboratory reports, chain-of-custody forms, corrective actions taken during the compliance year, and identification of any compliance activities or corrective actions that were not implemented.

## **3. Final Report**

Dischargers shall prepare a final report following completion of project construction to demonstrate that the project is completed as planned and water quality impacts have been mitigated. The discharger shall electronically submit the report through the SMARTS that describes: 1) whether the project was completed as planned in the NOI and/or any modification of the construction plans for the proposed storm water collection treatment, or disposal facilities or restoration work; 2) details any change in the amount of impervious coverage for the project site beyond what was authorized; and 3) any significant problem(s) which occurred during project construction and remedial measures planned or implemented.

#### **4. Restoration Monitoring and Reporting**

Restoration projects are often executed to improve existing water quality conditions; therefore, it is necessary to monitor restoration project effectiveness until it is self sustaining. Monitoring information can also identify project and/or construction method strengths and weaknesses. This knowledge can provide feedback into the maintenance of the existing system and also be applied to future water quality improvement projects.

This General Permit requires the discharger to submit a detailed effectiveness monitoring plan as part of the Construction Site Monitoring and Reporting Plan (CSMRP) that includes annual performance criteria for the review and acceptance by the Lahontan Water Board staff. A contingency plan must also be submitted for actions to be taken if performance criteria are not met.

Ideally, pre- and post-construction monitoring is required to best evaluate the success of the restoration project. Monitoring should include, but not be limited to, assessments of vegetative cover and water quality and quantity measurements. Where appropriate, monitoring should also include upgradient and downgradient sampling of water entering a treatment method (sediment can, sand and oil trap).

#### **X. COMPLIANCE DETERMINATION**

Order No. R6T-2005-007 was silent on how compliance with the applicable limitations was determined. This General Permit provides more detailed information on how compliance will be determined as discussed below.

##### **A. Compliance with Effluent Limitations**

As previously discussed under section V – Effluent Limitations, the technology-based turbidity NEL in this General Permit is based on the performance of a BMP assuming a certain design storm (defined as the storm producing a rainfall amount). Compliance with the NELs will not be required for storm events that exceed the equivalent rainfall in a 20-year, 1-hour storm (1 inch of rainfall in a 1-hour period). The discharger is required to provide supporting documentation (i.e., evidence of actual rainfall amount for the area, such as an on-site rain gauge and rainfall data provided by NOAA) to the Lahontan Water Board for any claims that an effluent limit exceedance occurred during a storm event exceeding a 20-year, 1-hour storm.

Additionally, NELs may not apply when run-on conditions are causing an exceedance of an NEL or when discharges do not reach surface waters. The dischargers must provide data and information to support any claim that the NELs do not apply due to these circumstances.

## **B. Multiple Sample Data**

The NELs in this General Permit are evaluated as a maximum daily effluent limitation (MDEL). Pursuant to NPDES regulations (40CFR Part 122.2), *maximum daily discharge* limitation means the highest allowable “daily discharge.” *Daily* discharge means the “discharge or a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of measurement other than mass, the daily discharge is calculated as the average measurement of the pollutant over the day. For purposes of this General Permit, the daily average effluent value is defined as the arithmetic mean of the daily effluent data. When determining compliance when more than one sample result is available due to collection at multiple discharge points and/or multiple times during the calendar day, the Discharger shall compute the arithmetic mean concentration for each day of discharge.

Samples must be representative of the volume and quality of runoff from the site. Sample collection must not be manipulated in such a way as to skew the maximum daily effluent value. However, dischargers may indicate the proportional area or flow from the site that each discharge point represents and factor this into the daily average for the entire site when reporting the data.

## **C. Maximum Daily Effluent Limitation**

The NELs in this General Permit are evaluated as a maximum daily effluent limitation (MDEL). If a daily average concentration (or when applicable, the daily median) exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period.

## **D. Sampling by Other Parties**

Sampling may be conducted by persons other than the Discharger. Water Board staff, operators of municipal separate storm sewer systems, or others may analyze storm samples. Samples collected by others may be used with other data to determine MDELs and to conduct compliance determinations, as provided above.

## **XI. PUBLIC PARTICIPATION**

The Lahontan Water Board is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for discharges of storm water from construction-related activities. This proposed General Permit has been developed for review and comment by the public. As a step in the WDR adoption process, the Lahontan Water

Board staff has developed tentative WDRs. The Lahontan Water Board encourages public participation in the WDR adoption process.

#### **A. Notification of Interested Parties**

On January 27, 2011, the Lahontan Water Board notified dischargers, interested agencies, and other interested parties of its intent to prescribe waste discharge requirements for construction-related activities in the Lake Tahoe Hydrologic Unit, and provided them with an opportunity to submit their written comments and recommendations on the draft tentative permit by February 26, 2011. Notification was provided through mailing, list serve system emails, and posting on the Lahontan Water Board website. Lahontan Water Board staff revised the permit based on comments received on the tentative draft, and on March 11, 2011, the Lahontan Water Board notified dischargers, interested agencies, and other interested parties that a proposed permit was available for public review. Notification was provided through mailing, list serve system emails, newspaper notifications, and posting on the Lahontan Water Board website.

#### **B. Written Comments**

The staff determinations are proposed. Interested persons are invited to submit written comments concerning these proposed WDRs. Written comments must be submitted either in person, by email, or by U.S. mail to the Lahontan Water Board. The mailing address for the Lahontan Water Board is 2501 Lake Tahoe Blvd, South Lake Tahoe, CA 96150. Email comments may be submitted to the attention of Bud Amorfini at [bamorfini@waterboards.ca.gov](mailto:bamorfini@waterboards.ca.gov).

To be fully considered by staff and the Lahontan Water Board, written comments must be received at the Lahontan Water Board within ten days of the Public Hearing to consider adopting the updated permit. Comments received after that date will be forwarded on to the Lahontan Water Board.

#### **C. Public Workshop**

The Lahontan Water Board conducted two public workshops on February 10, 2011, to inform and discuss issues relating to the tentative WDRs with interested parties.

#### **D. Public Hearing**

The Lahontan Water Board has scheduled a public hearing to consider adopting the updated permit. The Board meeting is scheduled as follows:

Date: April 13-14, 2011  
Time: TBD  
Location: Lake Tahoe Community College

1 College Drive  
South Lake Tahoe, CA 96150

Interested persons are invited to attend. At the public meeting, the Lahontan Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/lahontan/> where the public can access the current agenda for changes in dates and locations.

#### **E. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Lahontan Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Lahontan Water Board's action to the following address:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

#### **E. Information and Copying**

The tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the Lahontan Water Board at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday, at 2501 Lake Tahoe Boulevard, South Lake Tahoe, CA 96150. Copying of documents may be arranged through the Lahontan Water Board by calling (530) 542-5400.

#### **F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Lahontan Water Board, reference this facility, and provide a name, address, and phone number.

#### **G. Additional Information**

Requests for additional information or questions regarding this order should be directed to Bud Amorfini, Engineering Geologist, at 530-542-5463 or by email at [Bamorfini@waterboards.ca.gov](mailto:Bamorfini@waterboards.ca.gov).



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**BOARD ORDER NO. R6T-2003-0004**

GENERAL WASTE DISCHARGE REQUIREMENTS  
FOR

**SMALL CONSTRUCTION PROJECTS, INCLUDING UTILITY, PUBLIC WORKS, AND  
MINOR STREAMBED/LAKEBED ALTERATION PROJECTS  
IN THE LAHONTAN REGION  
EXCLUDING THE LAKE TAHOE HYDROLOGIC UNIT**

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The California Regional Water Quality Control Board, Lahontan Region (Regional Board) finds:

1. In accordance with Section 13260 of the California Water Code, the discharge of storm water runoff and products of erosion from small construction projects, including utility, public works, within certain sensitive watersheds in the Lahontan Region, and discharges associated with minor streambed/lakebed alteration projects in the Lahontan Region is considered to be a discharge of waste that could affect the quality of waters of the State.
2. The Regional Board may prescribe requirements for any proposed discharge, in accordance with Section 13263 of the California Water Code.
3. Implementation of temporary best management practices (BMPs) is an effective and economical means of preventing or minimizing the discharge of the products of erosion, sediment-laden storm water, and minor waste material spills from small construction projects.
4. Implementation of permanent best management practices (BMPs) after construction is an effective means of treating storm water runoff from impervious surfaces and of preventing erosion following construction of small sites.
5. This General Permit regulates: 1) discharges associated with minor streambed/lakebed alteration projects in the Lahontan Region; and 2) storm water discharges from small construction activity that enter surface waters either directly or indirectly through drainage conveyances or municipal separate storm sewer facilities within the following Hydrologic Units/Areas in the Lahontan Region (see Attachments "A", "B", and "C"):
  - a. Little Truckee River Hydrologic Unit (HU No. 636.00)
  - b. Truckee River Hydrologic Area (HU No. 635.20)
  - c. West Fork Carson River Hydrologic Unit (HU No. 633.00)
  - d. East Fork Carson River Hydrologic Unit (HU No. 632.00)
  - e. Mono Hydrologic Unit (HU No. 601.00)
  - f. Long Hydrologic Area (HU No. 603.10)

6. Small construction projects located within the jurisdiction of local agencies that have entered into a Memorandum of Understanding (MOU) with the Regional Board to implement a storm water construction pollution control program in accordance with the *Water Quality Control Plan for the Lahontan Region* (Basin Plan) are not subject to this General Permit. The Town of Mammoth Lakes has entered into such an MOU with the Regional Board and upon adoption of this Permit the Regional Board waives requirements for submitting Reports of Waste Discharge for small construction activity, as defined in Finding 9, within the Mammoth Lakes jurisdiction. Subsequent to the adoption of this Order, other jurisdictions may enter into MOUs with the Regional Board and qualify for a similar waiver.
7. Discharges of storm water runoff and products of erosion from certain construction projects in the Lake Tahoe Hydrologic Unit are regulated under separate General Waste Discharge Requirements and are not covered under this permit.
8. This General Permit does not preempt or supersede the authority of local storm water management agencies to prohibit, restrict, or control storm water discharges to separate storm sewer systems or other watercourses within their jurisdiction, as allowed by State and Federal law.
9. For purposes of this Order, a “small construction project” includes construction activity that results in land disturbance of 10,000 square feet or more and is not covered under the State Water Resources Control Board (SWRCB) Water Quality Order 99-08-DWQ (Statewide Construction General Permit). Land disturbance is clearing, grading, or disturbances to the ground, including excavation and stockpiling, within the footprint of the structure to be constructed, and any staging and access areas that disturb native soil conditions. Only the actual area of land disturbance is considered when determining whether a project must be covered under this Permit. For example, if a 1-acre parcel (43,560 square feet) is to be developed, but only 9,000 square feet of soil will be disturbed within the project site, coverage under this Permit is not required. Small construction projects also include utility projects proposed by a public or private utility and public works projects proposed by a public entity that involve 10,000 square feet or more of land disturbance.

The Statewide Construction General Permit currently covers projects involving one acre or more of land disturbance. Small construction activity that results in land disturbances of less than 10,000 square feet is subject to this General Permit if the construction activity is part of a larger common plan of development that, as a whole, encompasses 10,000 square feet, but less than 1 acre of soil disturbance. For example, a single development that is completed in two separate phases, with each phase disturbing 8,000 square feet, would require coverage under this Permit because the total land disturbance associated with the project as a whole is 16,000 square feet. For purposes of this Order, Construction activity does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility, nor does it include emergency construction activities required to protect public health and safety.

10. For purposes of this order, a “minor streambed/lakebed alteration project” is one that includes soil disturbing work, including maintenance dredging, within the high water mark of any water body in the Lahontan Region or the 100-year floodplain in the Truckee and Little Truckee River Hydrologic Units, and is not regulated by the Army Corps of Engineers under Clean Water Act (CWA) Section 404.
11. This General Permit does not authorize discharges of fill or dredged material regulated by the U.S. Army Corps of Engineers under CWA Section 404 and does not constitute a state water quality certification under CWA Section 401.

12. To obtain authorization for proposed storm water discharges associated with land disturbing activities to ground and/or surface waters pursuant to this General Permit, the Discharger must submit a Notice of Intent (NOI – Attachment “D”) to comply with the General Permit and a filing fee to the Regional Board prior to commencement of construction activities. The NOI must include a description of specific temporary and permanent Best Management Practices (BMPs) to be implemented to prevent or minimize the discharge of waste from the project site during and after construction (see Attachment “E”). For proposed construction activity on easements or on nearby property by agreement or permission, the entity responsible for the construction activity must submit the NOI and filing fee and shall be responsible for development and implementation of the BMPs. Coverage under the General Permit shall begin upon written notification from the Regional Board or 30 days following Regional Board receipt of an NOI if the applicant receives no response from the Regional Board.
13. If an individual National Pollutant Discharge Elimination System (NPDES) Permit is issued to a discharger for activities otherwise subject to this General Permit, or if an alternative general or individual permit is subsequently adopted which covers storm water discharges regulated by this General Permit, the applicability of this General Permit to such discharges is automatically terminated on the effective date of the individual permit or the date of approval for coverage under the subsequent General Permit.
14. Potential pollutant discharges from projects covered under this General Permit consist of products of erosion, construction waste materials, dewatering waste, turbid water and waste earthen materials from work within surface waters, and small amounts of petroleum products from construction equipment.
15. The Regional Board adopted and the State Water Resources Control Board (SWRCB) approved the *Water Quality Control Plan for the Lahontan Region* (Basin Plan). This General Permit implements the Basin Plan. Dischargers regulated by this General Permit must comply with the water quality standards, guidelines, and prohibitions in the Basin Plan, and subsequent amendments thereto.
16. Runoff from the project sites will potentially enter either ground or surface waters of the Hydrologic Units/Areas listed in Finding 5.
17. The beneficial uses of ground and surface waters within the Hydrologic Units/Areas listed in Finding 5 are provided in Chapter 2 of the Basin Plan. There are a variety of designated beneficial uses for individual water bodies that are too numerous to list in this General Permit. The pertinent information is available from the Basin Plan at the Regional Board offices and may be found at the following website - <http://www.swrcb.ca.gov/rwqcb6/files.htm>
18. A Negative Declaration for the adoption of this General Permit was certified by the Regional Board on January 8, 2003 (Resolution No. R6T-2003-0004) in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.).
19. The projects regulated by this General Permit are typically nonrecurring and short-term construction projects that will normally be completed within two construction seasons. The applicability of these requirements to the specific project may be revoked pursuant to Administrative Provisions – Section IV.D.
20. The Regional Board has notified the interested agencies and persons of its intent to adopt general waste discharge requirements for small construction projects and has provided them with an opportunity to submit their written views and recommendations.

21. The Regional Board in a public meeting heard and considered all comments pertaining to the requirements.

**IT IS HEREBY ORDERED** that all dischargers submitting an NOI, applicable fee, and BMP plan in accordance with this permit shall comply with the following:

**I. DISCHARGE PROHIBITIONS**

- A. The discharge of waste<sup>1</sup>, including but not limited to, waste earthen materials (such as soil, silt, sand, clay, rock, or other organic or mineral material) that causes violation of any narrative water quality objective contained in the Basin Plan, including the Nondegradation Objective, is prohibited.
- B. The discharge of waste that causes violation of any numeric water quality objective contained in the Basin Plan is prohibited.
- C. Where any numeric or narrative water quality objective contained in the Basin Plan is already being violated, the discharge of waste that causes further degradation or pollution is prohibited.
- D. The discharge, attributable to human activities, of solid or liquid waste materials, including but not limited to soil, silt, clay, sand, or other organic or earthen material, to surface waters of the Truckee River and Little Truckee River Hydrologic Units, is prohibited.
- E. The discharge or threatened discharge, attributable to human activities, of solid or liquid waste materials, including but not limited to soil, silt, clay, sand, or other organic or earthen material, to lands within the 100-year floodplain of the Little Truckee River and Truckee River, or any tributary to the Little Truckee and Truckee Rivers, is prohibited. A summary of the waste discharge prohibitions and exception criteria is presented in Attachment "F."
- F. Unless specifically granted, authorization pursuant to this General Permit does not constitute an exemption to applicable discharge prohibitions prescribed in the Basin Plan.
- G. Unless otherwise authorized by a separate waste discharge permit, discharges of material other than storm water, including dewatering waste, to a separate storm sewer system or waters of the state are prohibited. Discharge of dewatering waste to land is covered under this General Permit providing that there are no pollutants present that could degrade groundwater quality. If no land disposal alternatives exist for dewatering waste, the Discharger may seek coverage to discharge dewatering waste to surface waters under a separate NPDES permit by submitting a separate Report of Waste Discharge.
- H. Discharges of non-storm water are allowed only when necessary for performance and completion of construction projects and where they do not cause or contribute to a violation of any water quality standard. Such discharges must be described in the BMP plan (see Provision III – Best Management Practices). Wherever feasible, alternatives that do not result in the discharge of non-storm water, or that discharge any non-storm water to land, shall be implemented.

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<sup>1</sup> CWC Section 13050(d): "Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

- I. Storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.
- J. Except under emergency conditions, land disturbance between October 15 of any year and May 1 of the following year is prohibited in the Little Truckee River and Truckee River Hydrologic Units. Where it can be shown that granting a variance would not cause or contribute to the degradation of water quality, an exception to the dates stated above may be granted in writing by the Executive Officer.
- K. The discharge of fresh concrete or grout to surface waters is prohibited, unless the discharge is confined to the work area and isolated from flowing streams or water bodies.
- L. The discharge of oil, gasoline, diesel fuel, any petroleum derivative, any toxic chemical, or hazardous waste is prohibited.
- M. The discharge of waste, including wastes contained in storm water, shall not cause a pollution, threatened pollution, or nuisance as defined in Section 13050 of the California Water Code.

## II. RECEIVING WATER LIMITATIONS

- A. Storm water discharges and authorized nonstorm water discharges to any ground water or surface water shall not adversely impact human health or the environment.
- B. The discharge of storm water from the project area to surface waters shall not cause or contribute to a violation of any narrative or numeric water quality objective contained in the Basin Plan. Where any numeric or narrative water quality objective contained in the Basin Plan is already being violated, the discharge of waste that causes further degradation or pollution is prohibited. A complete listing of water quality objectives is presented in the Basin Plan, Chapter 3 and can be found at the following website - <http://www.swrcb.ca.gov/rwqcb6/files.htm>

Water quality objectives that apply to all surface waters within the Lahontan Region include, but are not limited to, the following construction-related pollutants.

### **Oil and Grease**

Waters shall not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect the water for beneficial uses.

For natural high quality waters, the concentration of oils, greases, or other film or coat generating substances shall not be altered.

### **pH**

In fresh waters with designated beneficial uses of COLD or WARM, changes in normal ambient pH levels shall not exceed 0.5 pH units. For all other waters of the Region, the pH shall not be depressed below 6.5 nor raised above 8.5.

*The Regional Board recognizes that some waters of the Region may have natural pH levels outside of the 6.5 to 8.5 range. Compliance with the pH objective for these waters will be determined on a case-by-case basis.*

**Sediment**

The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses.

**Settleable Materials**

Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high quality waters, the concentration of settleable materials shall not be raised by more than 0.1 milliliter per liter.

**Turbidity**

Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. For all waters, increases in turbidity shall not exceed natural levels by more than 10 percent. Additionally for the Little Truckee Hydrologic Unit and Truckee River Hydrologic Area, turbidity shall not be raised above 3 Nephelometric Turbidity Units (NTU) mean of monthly means. Additionally for the West Fork Carson River Hydrologic Unit, the turbidity shall not be raised above a mean of monthly means value of 2 NTU.

**Toxicity**

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

- C. Should it be determined by the Discharger or Regional Board staff that storm water discharges and/or authorized nonstorm water discharges are causing or contributing to a violation of an applicable water quality standard, the Discharger shall:
1. Implement corrective measures immediately following discovery that water quality standards were violated, followed by notification to the Regional Board by telephone as soon as possible but no later than 48 hours after the discharge has been discovered. This notification shall be followed by a report within 14 calendar days to the Regional Board, unless otherwise directed by the Regional Board, describing (1) the nature and cause of the water quality standard violation; (2) the BMPs currently being implemented; (3) any additional BMPs which will be implemented to prevent or reduce pollutants that are causing or contributing to the violation of water quality standards; and (4) any maintenance or repair of BMPs. This report shall include an implementation schedule for corrective actions and shall describe the actions taken to reduce the pollutants causing or contributing to the violation.
  2. The Discharger shall revise storm water pollution control measures and monitoring procedures to incorporate: 1) the additional BMPs that have been, and will be implemented; 2) the implementation schedule; and 3) any additional monitoring needed.
  3. Nothing in this section shall prevent the Regional Board from enforcing any provisions of this General Permit while the Discharger prepares and implements the above report.

### III. BEST MANAGEMENT PRACTICES (BMPs)

- A. Prior to the initiation of any construction related activities, the Discharger shall develop a BMP implementation plan and install temporary erosion control facilities to prevent transport of earthen materials and other wastes off the property. Guidance for developing the BMP plan is provided in Attachment "E."
- B. All land disturbing activities shall be conducted in accordance with the Lahontan Region Project Guidelines for Erosion Control (Attachment "G").
- C. If the Regional Board determines that the proposed BMPs will not achieve the applicable standards and receiving water objectives, the Discharger may be required to implement additional or alternative BMPs.

### IV. ADMINISTRATIVE PROVISIONS

- A. Applicability and Timing
  - 1. Upon receipt of the applicable filing fee, an NOI to comply with the provisions of this General Permit, and an adequate BMP plan, the Discharger will be issued a written Notice of Applicability (NOA). The Regional Board reserves the right to request additional information if the NOI and/or BMP plan is deemed inadequate.
  - 2. The Discharger shall submit a NOI, a BMP plan, and the appropriate fee at least 30 days prior to the proposed date of construction. Additional time (up to 120 days) will be required for projects that propose disturbance to flood plains or waters of the state. Construction may not begin until a written NOA is received from the Regional Board or 30 days have elapsed from the date the NOI was received by the Regional Board. If the Discharger is notified in writing that the NOI and/or BMP plan is incomplete, the Discharger must provide the additional information requested in the notice and the Regional Board may take up to 30 days to respond with an NOA or request for additional information.
  - 3. All Dischargers must implement the BMP plan and the Monitoring and Reporting Program upon commencement of construction.
  - 4. Projects may be brought to the Regional Board for consideration of adoption of an individual WDR when the Executive Officer deems it necessary to achieve water quality protection.
  - 5. The conditions of this General Permit do not exempt the Discharger from compliance with any other laws, regulations, or ordinances which may be applicable, do not legalize land treatment and disposal facilities, and leave unaffected any further restraints on those facilities which may be contained in other statutes or required by other regulatory agencies.
- B. Provisions
  - 1. All Dischargers must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to drainage systems or other water courses under their jurisdiction.

2. The Discharger shall at all times fully comply with the engineering plans, specifications, and technical reports developed for the project and/or submitted with the NOI. The Discharger shall at all times fully comply with the BMP Plan.
3. The Discharger must comply with the Standard Provisions for Waste Discharge Requirements contained in Attachment "H", which is made part of this General Permit.
4. Pursuant to California Water Code Section 13267, the Discharger shall comply with Monitoring and Reporting Program No. **R6T-2003-0004** hereby made a part of this General Permit.
5. The owners of property subject to this General Permit shall have a continuing responsibility for ensuring compliance with the General Permit. The Discharger identified in the NOA shall remain liable for General Permit violations until an NOI is received from the new owner/operator. Notification of applicable General Permit requirements shall be furnished to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board. This General Permit is transferable to the new owner. Any change in the ownership and/or operation of property subject to this General Permit shall be reported to the Regional Board. The new owner must comply with the General Permit, including the Monitoring and Reporting Program.

C. Revocation Procedures

Coverage under the General Permit shall continue until revoked in writing by the Regional Board staff. The Discharger is responsible for notifying the Regional Board in writing that the project is complete, certifying that the required conditions are met, and requesting revocation of coverage under the General Permit. The General Permit for the specific project will be revoked provided the following conditions are met: 1) the construction project is complete and soil stabilization measures are in place and functioning; 2) permanent BMPs have been installed and are functional; 3) information required by the attached Monitoring and Reporting Program has been submitted; and 4) Regional Board staff have inspected the site, if deemed necessary.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on January 8, 2003.

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HAROLD J. SINGER  
EXECUTIVE OFFICER

Attachment A: Map of Little Truckee River Hydrologic Unit and Truckee River Hydrologic Area

Attachment B: Map of West and East Forks Carson River Hydrologic Units

Attachment C: Map of Mono Hydrologic Unit and Long Hydrologic Area

Attachment D: Notice of Intent Form



Attachment E: Best Management Practices Plan

Attachment F: Waste Discharge Prohibitions and Exception Criteria for Projects within the  
Truckee River Hydrologic Unit

Attachment G: Lahontan Region Project Guidelines for Erosion Control

Attachment H: Standard Provision for Waste Discharge Requirements

BA/cgT: Small Construction General Permit WDR

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**MONITORING AND REPORTING PROGRAM NO. R6T-2003-0004  
GENERAL WASTE DISCHARGE REQUIREMENTS**

FOR

**SMALL CONSTRUCTION PROJECTS, INCLUDING UTILITY, PUBLIC WORKS,  
AND MINOR STREAMBED/LAKEBED ALTERATION PROJECTS  
LAHONTAN REGION  
EXCLUDING THE LAKE TAHOE HYDROLOGIC UNIT**

---

- A. An inspection of the construction site shall be made daily during active construction and monthly during long periods of inactivity (e.g. winter), by the Discharger, resident engineer, superintendent, general contractor, or equivalent. The purpose of the inspection is to discover potential water quality problems at the construction site so that the Discharger can implement corrective measures. The following items should be inspected at the site, as applicable:
1. Damaged containment dikes or erosion fencing
  2. Unauthorized access by vehicles and/or sediment tracking off the site
  3. Boundary fence damage or removal
  4. Disturbed areas with no erosion control protection
  5. Evidence of any sediment leakage through erosion control fencing or containment dikes
  6. Soil piles unprotected or located in drainage ways
  7. Spilled chemicals, paints, fuels, oils, sealants, etc.
  8. Upstream runoff diversion structures in place and operational
  9. Any signs of downstream erosion from runoff discharges
  10. Sediment accumulation within onsite storm water drainage facilities

B. Following completion of project construction, the Discharger shall submit a notice of completion and request for revocation of coverage under the permit. The notice of completion should include the following information:

1. Details on any modification from the construction plans to the proposed stormwater collection, treatment, or disposal facilities.
2. Details on any changes to the amount of impervious coverage for this project.
3. Any significant problems which occurred during project construction and remedial measures taken.
4. Statement that onsite stabilization/revegetation measures have been completed.
5. Certification that project is in compliance with the requirements of the General Permit.

The final report shall contain the name of the project and shall be signed and dated by the property owner or his legal representative. The report shall be submitted to the Regional Board office in South Lake Tahoe.

Ordered by \_\_\_\_\_ Date: \_\_\_\_\_  
HAROLD J. SINGER  
EXECUTIVE OFFICER

**ATTACHMENT "D"**  
**California Regional Water Quality Control Board – Lahontan Region**  
**NOTICE OF INTENT**  
**TO COMPLY WITH THE TERMS OF THE**  
**GENERAL WASTE DISCHARGE REQUIREMENTS**  
**FOR**

**SMALL CONSTRUCTION PROJECTS, INCLUDING UTILITY, PUBLIC WORKS, AND MINOR STREAMBED/LAKEBED**  
**ALTERATION PROJECTS**  
**IN THE LAHONTAN REGION**  
**EXCLUDING THE LAKE TAHOE HYDROLOGIC UNIT**  
(WQ ORDER No. R6T-2003-0004)

**I. NOI STATUS (SEE INSTRUCTIONS)**

|                    |  |   |  |
|--------------------|--|---|--|
| MARK ONLY ONE ITEM | 1. <input type="checkbox"/> New Construction | 2. <input type="checkbox"/> Change of Information for WDID# |  |
|--------------------|--|---|--|

**II. PROPERTY OWNER**

|                 |                |     |                         |
|-----------------|----------------|-----|-------------------------|
| Name            | Contact Person |     |                         |
| Mailing Address | Title          |     |                         |
| City            | State          | Zip | Phone<br>(     )     -- |

**III. DEVELOPER/CONTRACTOR INFORMATION**

|                      |                |     |                         |
|----------------------|----------------|-----|-------------------------|
| Developer/Contractor | Contact Person |     |                         |
| Mailing Address      | Title          |     |                         |
| City                 | State          | Zip | Phone<br>(     )     -- |

**IV. CONSTRUCTION PROJECT INFORMATION**

|   |  |   |  |
|---|--|---|--|
| Site/Project Name   |  | Site Contact Person   |  |
| Physical Address/Location   |  | Latitude<br>_____°  | Longitude<br>_____°                      |
| City (or nearest City)  |  | Zip   | County                                   |
|   |  | Site Phone Number<br>(     )     --   | Emergency Phone Number<br>(     )     -- |
| A. Total size of construction site area:<br>_____ Acres   | C. Percent of site imperviousness (including rooftops):<br>Before Construction: _____ %<br>After Construction: _____ % |   | D. Tract Number(s): _____, _____         |
| B. Total area to be disturbed:<br>_____ Acres (% of total _____)  |  |   | E. Mile Post Marker: _____               |
| F. Is the construction site part of a larger common plan of development or sale?<br><input type="checkbox"/> YES <input type="checkbox"/> NO  |  | G. Name of plan or development:   |  |
| H. Construction commencement date: ____/____/____   |  | J. Projected construction dates:<br>Complete grading: ____/____/____     Complete project: ____/____/____ |  |
| I. % of site to be mass graded: _____   |  |   |  |
| K. Type of Construction (Check all that apply):<br>1. <input type="checkbox"/> Residential     2. <input type="checkbox"/> Commercial     3. <input type="checkbox"/> Industrial     4. <input type="checkbox"/> Reconstruction     5. <input type="checkbox"/> Transportation<br>6. <input type="checkbox"/> Utility     Description: _____     7. <input type="checkbox"/> Other (Please List): _____ |  |   |  |

**V. BILLING INFORMATION**

|   |                 |                |     |
|---|-----------------|----------------|-----|
| <b>SEND BILL TO:</b><br><input type="checkbox"/> OWNER<br>(as in II. above) | Name            | Contact Person |     |
| <input type="checkbox"/> DEVELOPER<br>(as in III. above)                    | Mailing Address | Phone/Fax      |     |
| <input type="checkbox"/> OTHER<br>(enter information at right)              | City            | State          | Zip |

**VI. REGULATORY STATUS**

|   |  |                              |                             |
|---|--|------------------------------|-----------------------------|
| A. Has a local agency approved a required erosion/sediment control plan?.....   |  | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Does the erosion/sediment control plan address construction activities such as infrastructure and structures?.....                            |  | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Name of local agency: _____   |  | Phone: (     )     --        |                             |
| B. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit or 401 Water Quality Certification?..... |  | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| If yes, provide details: _____  |  |                              |                             |

**VII. RECEIVING WATER INFORMATION**

|  |   |
|--|---|
| A. Does the storm water runoff from the construction site discharge to (Check all that apply): |   |
| 1. <input type="checkbox"/>  | Indirectly to waters of the State   |
| 2. <input type="checkbox"/>  | Storm drain system - Enter owner's name: _____                            |
| 3. <input type="checkbox"/>  | Directly to waters of State (e.g. , river, lake, creek, stream, wetlands) |
| B. Name of receiving water: (river, lake, creek, stream, wetlands): _____                      |   |

**VIII. BEST MANAGEMENT PRACTICES (BMP) PLAN AND FEE**

|   |                              |                             |
|---|------------------------------|-----------------------------|
| Have you included a BMP Plan with this submittal? ..                  | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Have you included payment of the annual fee with this submittal?..... | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

**X. CERTIFICATIONS**

|   |  |
|---|--|
| <p>"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with."</p> <p><b>Printed Name:</b> _____</p> <p><b>Signature:</b> _____ <b>Date:</b> _____</p> <p><b>Title:</b> _____</p> |  |
|---|--|

## ATTACHMENT “E”

### BEST MANAGEMENT PRACTICES PLAN

The purpose of the Best Management Practices (BMP) plan is to evaluate potential sources of sediment and other pollutants at the construction site and put controls in place that will effectively prevent pollutant discharges to surface and ground waters. The following general pollution control elements should be addressed in the BMP Plan:

1. retain soil and sediment on the construction site;
2. prevent non-storm water discharges that would discharge pollutants off site;
3. prevent the discharge of other pollutants associated with construction activities to land or surface waters;
4. permanently stabilize disturbed soils; and
5. minimize the effects of increased storm water runoff from impervious surfaces.

For detailed information on construction related BMPs, the EPA document Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices may be found at the following website:

[http://cfpub.epa.gov/npdes/pkeyword.cfm?keywords=BMPs&program\\_id=0](http://cfpub.epa.gov/npdes/pkeyword.cfm?keywords=BMPs&program_id=0)

Additional information may be also be obtained by contacting the Lahontan Regional Water Quality Control Board.

Specific guidance for completing the Best Management Practices (BMP) Plan is provided below. The BMP Plan must be submitted with the Notice of Intent (NOI) to obtain coverage under the General Permit. Use the attached form for preparing the BMP plan.

#### Temporary Erosion Control

This element of the BMP Plan addresses temporary erosion control or soil stabilization measures to be implemented during the time while active construction and land disturbing work is active. The most efficient way to address erosion control is to preserve existing vegetation where feasible, limit disturbance, and stabilize and revegetate disturbed areas as soon as possible after grading or construction. Use of temporary erosion control measures is especially important on large graded sites where soil exposure to rainfall and wind can cause significant soil loss if left unprotected during the time active construction activities are conducted. Some of these measures may overlap with the permanent soil stabilization measures discussed later in the section. Until permanent vegetation is established, temporarily covering the soil is the most cost-effective and expeditious method to prevent and minimize erosion.

**Indicate on the BMP Plan what methods will be used to prevent erosion from cut and fill slopes and other disturbed areas after grading activities are completed, but before permanent soil stabilization measures can be implemented. Options may include, but are not limited to:**

- **Covering with mulch**
- **Temporary seeding or planting**
- **Applying soil stabilizers or binders (tackifier)**

- **Placing fiber rolls/logs on bare slopes**
- **Covering surfaces with erosion control blankets**
- **Diverting run off around disturbed areas using stabilized conveyances**

### Sediment Control

Sediment control BMPs are required at appropriate locations along the site perimeter and at all internal inlets to the storm drain system. Sediment controls used in combination with the erosion controls described above can effectively prevent the discharge of pollutants off site. Effective filtration devices, barriers, and settling devices shall be selected, installed and maintained properly. The sediment control plan must also include provisions to temporarily stabilize construction access points such that soil, sediment, and other construction related materials are not tracked out beyond the site perimeter.

**Indicate on the BMP Plan what sediment controls will be used at the site. Options may include, but are not limited to:**

#### **Filter barriers -**

- **fiber rolls/logs**
- **silt fence**
- **straw bale barriers**
- **gravel inlet filters**

#### **Retention structures -**

- **sediment traps**
- **settling basins**

#### **Stabilized access points/good housekeeping –**

- **crushed rock**
- **mulch**
- **landing mats**
- **frequent sweeping**

### Stabilization

All disturbed areas of the construction site must be stabilized once construction is complete. Disturbed areas include drainage ditches or channels. Stabilization means implementing permanent rather than temporary erosion controls. It is recommended to stabilize disturbed areas in inactive (no further land disturbance planned) portions of the site as soon as feasible. Final stabilization for the purposes of submitting a Notice of Termination (NOT) is satisfied when all soil disturbing activities are completed AND EITHER OF THE TWO FOLLOWING CRITERIA ARE MET:

1. A uniform vegetative cover with 70 percent coverage has been established OR:
2. equivalent stabilization measures have been employed. These measures include the use of such BMPs as mulch, erosion blankets, rip rap, fiber treatments, or other erosion resistant soil coverings or treatments.

Where background native vegetation covers less than 100 percent of the surface, such as in arid areas, the 70 percent coverage criteria is adjusted as follows: if the native vegetation on adjacent undisturbed areas covers 50 percent of the ground surface, 70 percent of 50 percent (.70 X .50=.35) would require 35 percent total uniform surface coverage.

**Indicate on the BMP Plan what stabilization measures will be used at the site. Options may include, but are not limited to:**

- **Seeding and/or planting (including hydro mulching/seeding)**
- **Mulching (wood chips, gravel, other) in combination with seeding/planting**
- **Installing erosion blankets (typically used on steeper disturbed slopes or unlined drainage ditches in combination with permanent seeding/planting)**
- **Placing rip rap**

#### Non-Storm Water Management

Non-storm water discharges should be eliminated or reduced to the extent feasible. Certain non-storm water discharges (e.g. irrigation of vegetative erosion control measures, pipe flushing and testing) may be necessary for the completion of some construction projects and are authorized by this General Permit. Other non-storm water discharges such as concrete washout, and driveway and street washing that would flush sediment or other pollutants to storm drains or surface waters are not allowed and would be a violation of this General Permit. De-watering waste should be discharged to land and infiltrated. A separate permit may be necessary if de-watering waste must be discharged to surface waters due to site constraints.

**Indicate on the BMP Plan how unauthorized non-storm water discharges will be controlled. Options include, but are not limited to:**

- **Approved off-site wash-out and wash-down areas**
- **Lined wash-out containment basins/traps**
- **De-watering waste infiltration or containment**

#### Spill Prevention and Control

The BMP Plan must describe measures to prevent and control potential leaks/spills of petroleum products such as fuels and lubricating materials, and other potentially hazardous materials. Secured storage areas for fuels and chemicals should be established and sufficient spill cleanup materials should be at the site to respond to accidental spills.

**Indicate on the BMP Plan what spill prevention and control measures will be used. Options include, but are not limited to:**

- **Covered material storage**
- **Material storage containment (berms, lined surfaces, secondary containment devices etc.)**
- **Regular equipment leak inspections**
- **Drip pans**
- **Absorbents**



## Post-Construction Storm Water Management

Post-construction storm water controls are needed to reduce the impacts of adding impervious surfaces to the landscape and adding potential pollutant sources within storm water drainage areas. Additional impervious surfaces reduce storm water infiltration and storage and increase the volume and velocity of run off down stream from developed sites. Whenever possible, use of infiltration and treatment devices is encouraged. Specific requirements for infiltration or treatment of storm water runoff volume from a 20-year, 1-hour storm from all impervious surfaces in the Truckee River, Little Truckee River, and Mammoth Lakes watersheds must be met (see Attachment “G”) Design approaches that limit overall land disturbance and reduce the amount of impervious surfaces are encouraged. Additional post-construction BMPs should also be incorporated into projects as appropriate and be properly maintained.

**Indicate on the BMP Plan what post-construction BMPs will be implemented. Options include, but are not limited to:**

- **Infiltration structures**
- **Detention/retention basins**
- **Storm water treatment vaults**
- **Biofilter BMPs (typically vegetated swales, strips, and buffers)**
- **Energy dissipation devices (structures designed to prevent erosion and slow water velocity associated with conveyance systems)**
- **Efficient irrigation systems**
- **Proper drain plumbing (e.g. ensuring that interior drains are not connected to a storm sewer system)**

## Maintenance, Inspection, and Repair

BMPs implemented at the site must be properly maintained to be effective. The BMP plan shall include provisions to inspect and maintain all BMPs identified in the plan throughout the duration of the project. Sites that are inactive and winterized through the wet season should be checked periodically to ensure the site remains stable. For sites where construction activity is conducted through the wet season, the Discharger must ensure that BMPs remain effective.

**Indicate on the BMP Plan how BMPs will be inspected and repaired in accordance with the following minimum program:**

**For inactive construction sites during wet season -**

- **Cease construction through wet season and winterize (see Attachment “G”)**

**For active construction sites during wet season -**

- **Inspect BMPs before and after storm events**
- **Inspect BMPs once each 24-hour period during extended storm events**
- **Implement repairs or design changes as soon as feasible depending upon worker safety and field conditions**
- **Have provisions to respond to failures and emergencies**

## BEST MANAGEMENT PRACTICES PLAN

Discharger Name: \_\_\_\_\_

Site Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_

County: \_\_\_\_\_

Use the template provided below to identify BMPs to be implemented at the construction site. Check the boxes next to the BMPs that will be used. If other BMPs will be used, describe them in the space provided for "Other BMP." Attach additional sheets if needed.

### TEMPORARY EROSION CONTROL

Erosion from graded or disturbed areas, including cut and fill slopes, will be temporarily protected once soil disturbing activities are completed by the following method(s):

- ☐ **Covering with mulch**
- ☐ **Temporary seeding or planting**
- ☐ **Applying soil stabilizers or binders (tackifier)**
- ☐ **Placing fiber rolls/logs on bare slopes**
- ☐ **Covering surfaces with erosion control blankets**
- ☐ **Diverting run off around disturbed areas using stabilized conveyances**
- ☐ **Other (describe below)**

## BEST MANAGEMENT PRACTICES PLAN

### SEDIMENT CONTROL

Excess sediment will be prevented from running off the site or to storm drain inlets by the following method(s):

**Filter barriers -**

- ☐ fiber rolls
- ☐ silt fence
- ☐ straw bale barriers
- ☐ gravel inlet filters

**Retention structures -**

- ☐ sediment traps
- ☐ settling basins

**Stabilized access points/good housekeeping –**

- ☐ crushed rock
- ☐ mulch
- ☐ landing mats
- ☐ frequent sweeping

☐ Other (describe below)

## BEST MANAGEMENT PRACTICES PLAN

### STABILIZATION

Disturbed soil areas not covered with impervious surfaces will be permanently stabilized by the following method(s):

- ☐ Seeding and/or planting (including hydro mulching/seeding)
- ☐ Mulching (wood chips, gravel, other) in combination with seeding/planting
- ☐ Installing erosion blankets (typically used on steeper disturbed slopes or unlined drainage ditches in combination with permanent seeding/planting)
- ☐ Placing rip rap (describe location)
- ☐ Other (describe below)

### NON-STORM WATER MANAGEMENT

Unauthorized non-storm water discharges will be controlled using the following method(s):

- ☐ Approved off-site wash-out and wash-down areas (describe location)
- ☐ Lined wash-out containment basins/traps (describe location)
- ☐ De-watering waste infiltration or containment (describe location)
- ☐ Other (describe below)

## BEST MANAGEMENT PRACTICES PLAN

### POST-CONSTRUCTION STORM WATER MANAGEMENT

The following post-construction BMPs will be implemented to reduce impacts from additional impervious surfaces and pollutant sources (include design calculations used to size BMPs):

- ☐ **Infiltration structures**
- ☐ **Detention/retention basins**
- ☐ **Storm water treatment vaults**
- ☐ **Biofilter BMPs (typically vegetated swales, strips, and buffers)**
- ☐ **Energy dissipation devices (structures designed to prevent erosion and slow water velocity associated with conveyance systems)**
- ☐ **Efficient irrigation systems**
- ☐ **Proper plumbing design (e.g. ensuring that interior drains are not connected to a storm sewer system)**
- ☐ **Other (describe below)**

## BEST MANAGEMENT PRACTICES PLAN

### MAINTENANCE, INSPECTION, AND REPAIR

BMPs will be inspected and repaired in accordance with the following minimum program:

**For inactive construction sites during wet season (October 15 – May 1) –**

- ☐ Cease construction through wet season and winterize (see Attachment “G”)

**For active construction sites during wet season (October 15 – May 1) –**

- ☐ Inspect BMPs, and repair if needed, before and after storm events
- ☐ Inspect BMPs once each 24-hour period during extended storm events
- ☐ Implement repairs or design changes as soon as feasible depending upon worker safety and field conditions
- ☐ Have provisions to respond to failures and emergencies
- ☐ Other (describe below)

ATTACHMENT “F”

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

**WASTE DISCHARGE PROHIBITIONS  
AND  
EXCEPTION CRITERIA  
FOR PROJECTS WITHIN THE TRUCKEE RIVER HYDROLOGIC UNIT**

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) prohibits the discharge or threatened discharge, attributable to human activities, of solid or liquid waste<sup>1</sup> materials (including, but not limited to, soil, silt, clay, sand and other organic and earthen materials) to lands within the 100-year floodplain of the Truckee River or within the 100-year floodplain of any tributary<sup>2</sup> to the Truckee River. The Regional Board may grant exceptions to the prohibition for repair or replacement of existing structures provided that a loss of additional floodplain area or volume does not occur, and Best Management Practices and mitigation measures are used to minimize any potential soil erosion and/or surface runoff problems.

The Regional Board may also grant exceptions to the prohibition for the following types of new projects:

- (1) Projects solely intended to reduce or mitigate existing sources of erosion or water pollution, or to restore the functional value to previously disturbed floodplain areas.
- (2) Bridge abutments, approaches, or other essential transportation facilities identified in an approved county general plan.
- (3) Projects necessary to protect public health or safety, or to provide essential public services.
- (4) Projects necessary for public recreation.
- (5) Projects that will provide outdoor public recreation within portions of the 100-year flood plain that have been substantially altered by grading and/or filling activities which occurred prior to June 26, 1975.

---

<sup>1</sup> Waste includes earthen material placed in a water body or carried to waters by erosive forces. Construction activity involving ground disturbance within 100-year floodplain areas is generally considered to constitute a threat of discharge.

<sup>2</sup> Tributaries include: perennial surface waters (rivers, streams, lakes, wetlands) and ephemeral (seasonal) watercourses exhibiting evidence of the occurrence of flowing water, and having the potential to transport water and/or sediment to another water body, including, but not limited to, named and unnamed streams, wetlands, and lakes.

The Basin Plan allows an exception to the prohibitions for new projects only when the Regional Board makes all of the following findings:

- The project is included in one or more of the five categories listed above.
- There is no reasonable alternative to locating the project or portions of the project within the 100-year flood plain.
- The project, by its very nature, must be located within the 100-year flood plain. (The determination of whether a project, by its very nature, must be located in a 100-year flood plain shall not apply to projects in category (5), above, and shall be based on the type of project proposed, not the particular site proposed.)
- The project incorporates measures which will ensure that any erosion and surface runoff problems caused by the project are mitigated to levels of insignificance.
- The project will not individually or cumulatively with other projects, directly or indirectly, degrade water quality or impair beneficial uses of water.
- The project will not reduce the flood flow attenuation capacity, the surface flow treatment capacity, or the ground water flow treatment capacity from existing conditions. All 100-year flood plain areas and volumes lost as a result of the project must be completely mitigated by restoration of previously-disturbed floodplain within or as close as practical to the project site.<sup>3</sup> The restored, new, or enlarged floodplain shall be of sufficient area and volume to more than compensate for the flood flow attenuation capacity, surface flow treatment capacity and ground water flow treatment capacity which are lost as a result of the project.

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<sup>3</sup> This finding will not be required for new projects necessary to protect public health and safety. For new projects necessary to provide essential public services, this finding will not be required when the Regional Board finds mitigation measures to be infeasible because the financial resources of the project proponent are severely limited.



## ATTACHMENT "G"

### LAHONTAN REGION PROJECT GUIDELINES FOR EROSION CONTROL

In the interest of protecting surface water quality from unnatural or accelerated erosion caused by land development, the following guidelines shall be followed:

**Guidelines Applicable To:** Little Truckee River Hydrologic Unit (HU No. 636.00)  
Truckee River Hydrologic Area (HU No. 635.20)  
West Fork Carson River Hydrologic Unit (HU No. 633.00)  
East Fork Carson River Hydrologic Unit (HU No. 632.00)  
Mono Hydrologic Unit (HU No. 601.00)  
Long Hydrologic Area (HU No. 603.10)

#### Temporary Construction BMPs

1. Surplus or waste materials shall not be placed in drainage ways or within the 100-year flood plain of surface waters.
2. All loose piles of soil, silt, clay, sand, debris, or earthen materials shall be protected in a reasonable manner to prevent discharge of pollutants to waters of the State. Material stockpiles should be placed on the upgradient side of excavation whenever possible. Stockpiles may also be protected by covering to prevent contact with precipitation and by placing sediment barriers around the stockpiles.
3. Dewatering shall be done in a manner so as to prevent the discharge of pollutants, including earthen materials, from the site. The first option is to discharge dewatering waste to land. A separate permit may be required if, due to site constraints, dewatering waste must be discharged to surface waters. Contact the Regional Board for information on discharging to surface waters.
4. All disturbed areas shall be stabilized by appropriate erosion and/or sediment control measures by October 15 of each year.
5. All work performed between October 15th and May 1st of each year shall be conducted in such a manner that the project can be winterized within 48 hours. Winterized means implementing erosion and/or sediment controls that will prevent the discharge of earthen materials from the site and the controls will remain effective throughout the rainy/snow season without requiring maintenance. In general, this requires stabilizing bare disturbed soils with mulch, erosion protection blankets, or other suitable materials, and installing perimeter sediment controls such as fiber logs or other similar materials that will remain effective during significant rain and snow events.
6. After completion of a construction project, all surplus or waste earthen material shall be removed from the site and deposited at a legal point of disposal.
7. All non-construction areas (areas outside of the construction zone that will remain undisturbed) shall be protected by fencing or other means to prevent unnecessary encroachment outside the active construction zone.
8. During construction, temporary erosion control facilities (e.g., impermeable dikes, filter fences, weed-free straw bales, etc.) shall be used as necessary to prevent discharge of earthen materials from the site during periods of precipitation or runoff.

9. Control of run-on water from offsite areas shall be managed (protected, diverted, treated, etc.) to prevent such water from degrading before it discharges from the site.

10. Where construction activities involve the crossing and/or alteration of a stream channel, such activities require a prior written agreement with the California Department of Fish and Game and shall be timed whenever possible to occur during the period in which streamflow is expected to be lowest for the year. Other control measures may be used as necessary to prevent adverse effects from work in surface waters.

#### Permanent Construction BMPs

1. Impervious surfaces should be constructed with infiltration trenches or comparable infiltration structures along downgradient sides to infiltrate the increase in runoff resulting from the new impervious surfaces. Infiltration structures should also be constructed to accept runoff from structural (roof top) drip lines. Other control measures may be considered if design and/or site constraints are such that construction of infiltration devices is infeasible. Additional specific design specifications are required for the Truckee, Little Truckee and Long Hydrologic Units/Areas (see specific requirements below).

2. Where possible, existing drainage patterns shall not be significantly modified.

3. Drainage swales disturbed by construction activities shall be stabilized by the addition of crushed rock or riprap, as necessary, or other appropriate stabilization methods.

4. Revegetated areas shall be regularly and continually maintained in order to assure adequate growth and root development. Physical erosion control measures (controls other than live vegetation) shall be placed on a routine maintenance and inspection program to provide continued erosion control integrity.

#### **Additional Requirements for Specific Watersheds**

##### Truckee River Hydrologic Area and Little Truckee Hydrologic Unit

1. Runoff from impervious surfaces shall be treated or contained onsite. For purposes of this requirement, the volume of water to be contained or treated is the 20-year, one-hour storm, which is equal to 0.7 inches of rain.

2. Except in the event of emergencies, land disturbance associated with project construction is prohibited between October 15<sup>th</sup> and May 1<sup>st</sup> of the following year. Exemptions may be granted by the Executive Officer on a case by case basis.

##### Long Hydrologic Area

**Policy: (Contact the Regional Water Quality Control Board for information on permitting requirements delegated to the Town of Mammoth Lakes under a Memorandum of Understanding)**

1. For Mammoth Lakes watershed at an elevation above 7,000 feet, drainage collection, retention, and infiltration facilities shall be constructed and maintained to prevent transport of the runoff from a 20-year, 1-hour design storm from the project site. A 20-year, 1-hour design storm for the Mammoth Lakes area is equal to 1.0 inch of rainfall.

## ATTACHMENT "H"

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

#### **STANDARD PROVISIONS** FOR WASTE DISCHARGE REQUIREMENTS

##### 1. Inspection and Entry

The discharger shall permit Regional Board staff:

- a. to enter upon premises in which an effluent source is located or in which any required records are kept;
- b. to copy any records relating to the discharge or relating to compliance with the waste discharge requirements;
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

##### 2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260 (c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.
- c. The owner(s) of, and discharger upon, property subject to waste discharge requirements shall be considered to have a continuing responsibility for ensuring compliance with applicable waste discharge requirements in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the waste discharge requirements shall be reported to the Regional Board. Notification of applicable waste discharge requirements shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.
- d. If a discharger becomes aware that any information submitted to the Regional Board is incorrect, the discharger shall immediately notify the Regional Board, in writing, and correct that information.

- e. Reports required by the waste discharge requirements, and other information requested by the Regional Board, must be signed by a duly authorized representative of the discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1000) for each day of violation.
- f. If the discharger becomes aware that their waste discharge requirements are no longer needed (because the project will not be built or the discharge will cease) the discharger shall notify the Regional Board in writing and request that their waste discharge requirements be rescinded.

3. Right to Revise Waste Discharge Requirements

The Board reserves the privilege of changing all or any portion of the waste discharge requirements upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the waste discharge requirements may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and reissuance, or modification.

5. Duty to Mitigate

The discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the waste discharge requirements which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with the waste discharge requirements. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the discharger, when necessary to achieve compliance with the conditions of the waste discharge requirements.

7. Waste Discharge Requirement Actions

The waste discharge requirements may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for waste discharge requirement

modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the waste discharge requirements conditions.

8. Property Rights

The waste discharge requirements do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the waste discharge requirements including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the waste discharge requirements shall kept and maintained by the discharger and be available at all times to operating personnel.

11. Severability

Provisions of the waste discharge requirements are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from treatment and disposal facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operation. The owner/operator must request the transfer in writing and receive written approval from the Regional Board Executive Officer.

14. Definitions

- a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.
- b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.

## **D.7 Region 7. Colorado River Regional Water Quality Control Board**

Order No. R7-2009-0300. NPDES No. CAG997001 General Waste Discharge Requirements (WDRs) and General National Pollutant Discharge Elimination System (NPDES) Permit for Low Threat Discharges to Surface Waters within the Colorado River Basin Region

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**

**COLORADO RIVER BASIN REGION**

73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260  
Phone: (760) 346-7491 • Fax: (760) 341-6820  
<http://www.waterboards.ca.gov/coloradriver>

**ORDER NO. R7-2009-0300**

**NPDES NO. CAG997001**

**GENERAL WASTE DISCHARGE REQUIREMENTS (WDRs) AND  
GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT  
FOR LOW THREAT DISCHARGES TO SURFACE WATERS  
WITHIN THE COLORADO RIVER BASIN REGION**

A Discharger, as described in the following table, who has complied with the requirements for coverage under this General Board Order, is authorized to discharge wastes, once permit coverage is effective, as described in this General Board Order.

For the purposes of this General Board Order, references to the terms, *Discharger*, *Permittee*, or *Enrollee* in applicable federal and state laws, regulations, plans, or policies are held to be equivalent to the term, *Discharger*, herein.


**Table 1. Discharger Information**

|                    |  |
|--------------------|--|
| <b>Dischargers</b> | Individuals and miscellaneous public and private entities discharging or proposing to discharge low threat wastewaters to surface waters of the Colorado River Basin Region are hereafter referred to as <i>Discharger</i> and are subject to the terms and conditions of this General Board Order. Low threat discharges are (a) treated or untreated, (b) clean or relatively pollutant-free, and (c) pose an insignificant threat to water quality. |
|--------------------|--|

**Table 2. Administrative Information**

|  |                          |
|--|--------------------------|
| This General Board Order was adopted by the Regional Water Quality Control Board on: | <b>November 19, 2009</b> |
| This General Board Order shall become effective on:                                  | <b>November 19, 2009</b> |
| This General Board Order shall expire on:  | <b>November 18, 2014</b> |

I, Robert Perdue, Executive Officer, do hereby certify that this General Board Order with all attachments is a full, true, and correct copy of a General Board Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on November 19, 2009.

  
Robert Perdue, Executive Officer

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## I. DISCHARGE INFORMATION

- A. Individuals, public agencies, private business, and other legal entities occasionally need to discharge treated or untreated wastewaters directly into surface waters of the United States that pose an insignificant or minimal threat (i.e., low threat) to water quality. Examples of activities producing such low threat discharges are categorized below. See section III.B. of this General Board Order for a longer list of examples within these activity categories.

1. **Water System-Related Activities.** Water treatment (including water recycling) facilities, industries, and other entities that maintain and operate potable or non-potable water systems occasionally need to release water to surface waters. Example activities include, but are not limited to, hydrostatic testing and disinfection of vessels, pipelines, tanks, reservoirs, and appurtenances; designed or planned pressure releases or flushing; and fire hydrant testing or flushing.

Discharges of hydrostatic test water were previously authorized under Waste Discharge Requirements (WDRs) General Board Order No. 98-300, National Pollutant Discharge Elimination System (NPDES) Permit No. CAG677001, NPDES Permit and General WDRs for Discharge of Hydrostatic Test Water to Surface Waters (a Colorado River Basin Region-wide General Permit). General Board Order No. 98-300 was rescinded on March 19, 2009. Discharges of hydrostatic test water may be authorized to discharge under this General Board Order.

2. **Dewatering Activities.** Entities discharging treated or untreated groundwater from permanent or temporary dewatering operations to construct or protect pipelines and other structures from groundwater infiltration or flotation.
3. **Groundwater Extraction Activities.** Entities involved in investigating or cleaning up sites with soil and/or groundwater pollution may extract groundwater that later needs to be discharged to surface waters. Low threat wastewaters are often generated when these entities drill, construct, and purge wells.
4. **Other Low Threat Discharge Activities.** Public and private entities may engage in other miscellaneous activities that result in low threat discharges to surface waters, including, but not limited to, pilot treatment discharges, evaporative condensate, equipment washing and spill wash water, swimming or ornamental pool drainage, and discharges that have the same types of waste. Although these discharges pose a low threat to water quality, they still require WDRs since they are not covered by an Individual<sup>1</sup> or other Statewide<sup>2</sup> or Regional Water Board-wide<sup>3</sup> WDRs.

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<sup>1</sup> The term, "Individual," refers to individual waste discharge requirements issued by the Regional Water Quality Control Board of the Colorado River Basin Region for the discharge.

<sup>2</sup> The terms, "Statewide" and "State Water Board," as used throughout this General Board Order, refer to the State Water Resources Control Board.

<sup>3</sup> The terms, "Regional Water Board-wide" and "Regional Water Quality Control Board," as used throughout this General Board Order, refer to the Regional Water Quality Control Board of the Colorado River Basin Region.

- B.** This General Board Order is intended to cover individuals or entities that discharge low threat wastewaters to surface waters<sup>4</sup>. Dischargers of low threat wastewaters to surface waters, who have been enrolled for coverage to allow the discharge under an existing Statewide or Regional Water Board-wide permit as listed in Table 3 or an individual permit, are not required to apply for coverage under this General Board Order; such individuals or entities may continue to discharge pursuant to the applicable existing permit in Table 3 or their individual permit. Background information concerning these general permits is provided in Attachment F (Fact Sheet) to this General Board Order.

**Table 3. Related State Water Board- or Regional Water Board-Wide General Permits**

| General Permit  | Water Quality Order No.<br>(NPDES General Permit No.) | Coverage   |
|---|---|--|
| WDRs for Discharges of Storm Water Associated with Construction Activity  | 99-08-DWQ<br>(CAS000002)                              | Statewide permit that applies to construction activities (clearing, grading, stockpiling, or excavation) that result in soil disturbances of at least 1 acre of total land.  |
| WDRs for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities      | 97-03-DWQ<br>(CAS000001)                              | Statewide permit that applies to new or existing industrial storm water discharges and authorized non-storm water discharges.  |
| WDRs for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)                        | 2003-0005-DWQ<br>(CAS000004)                          | Statewide permit that applies to storm water discharges from small MS4s.   |
| WDRs for the State of California, Department of Transportation (Caltrans)                                       | 99-06-DWQ<br>(CAS000003)                              | Statewide permit that applies to municipal storm water activities by Caltrans, in areas that require a MS4 permit and in areas that do not require a permit. Also applies to all Caltrans construction activities that require a permit under federal regulations. |
| Treated Groundwater from Cleanup of Petroleum-related and VOCs <sup>1</sup> Regional Water Board General Permit | R7-2009-0400<br>(CAG917001)                           | Applies to discharges resulting from the cleanup of groundwater polluted by releases of petroleum related organic compounds and other VOCs associated with chemical releases.  |
| Statewide General NPDES Permit for Utility Vaults and Underground Structures                                    | 2006-0008-DWQ<br>(CAG990002)                          | Statewide permit that applies to utility companies with short-term, intermittent discharges from utility vaults and underground structures.  |

<sup>4</sup> This General Board Order is not intended to cover releases to surface water from water systems used to transport and deliver surface water for groundwater replenishment, irrigation or other municipal, industrial or agricultural uses. Likewise, this General Board Order is also not intended to cover releases to surface water from untreated groundwater wells when operated as drinking water sources. In addition, this General Board Order is also not intended to cover releases to surface water from subsurface drainage systems installed to reclaim lands for beneficial uses. Further, this General Board Order is not intended to cover discharge activities conducted by Metropolitan Water District of Southern California.

| General Permit | Water Quality Order No.<br>(NPDES General Permit No.) | Coverage |
|----------------|---|----------|
|----------------|---|----------|

<sup>1</sup> VOCs = Volatile Organic Chemicals or Compounds

- C.** The water quality characteristics most likely of concern for the discharge types covered by this General Board Order include biochemical oxygen demand (BOD), total suspended solids (TSS), oil and grease, pH, total residual chlorine (TRC), turbidity, settleable solids, total dissolved solids (TDS) and total petroleum hydrocarbons (TPH).

## II. NOTIFICATION REQUIREMENTS

### A. General Permit Application and Coverage

To obtain coverage under this General Board Order, which also serves as an NPDES permit, the Discharger shall submit the following information to the Regional Water Board: (1) a completed Notice of Intent (NOI); (2) results of wastewater sampling; (3) proposed practices to comply with effluent limitations, if applicable; (4) Best Management Practices (BMP) Plan or Control Strategy Plan; (5) categorical exception data, if applicable; and (6) filing fee, plus applicable surcharges. A Discharger having multiple discharges involving the same or substantially similar types of operations into the receiving water(s) need only submit one NOI but must specify in the NOI estimates of the number, frequency, rate, and types of discharges expected in the receiving water(s). The Discharger, if enrolled for coverage under this General Board Order, will be required to provide a summary update on the actual discharges in an annual report.

- 1. Notice of Intent.** All applicants must complete and submit an NOI as provided in Attachment C. The NOI requires Dischargers seeking coverage under this General Board Order to submit the following information:
  - a.** General project(s) or facility information;
  - b.** Indication of discharge type(s), discharge period(s) (duration), proposed rate of discharge(s), and whether the discharge(s) is continuous or intermittent;
  - c.** Indication that the wastewater discharges from drainage of ornamental pools, golf course lakes, and impounded water do not contain pesticides, insecticides, biocides, wastes and/or other chemicals that may have been applied to the wastewater;
  - d.** Description of the discharge location(s);
  - e.** Information concerning the receiving waterbody(ies);
  - f.** Map (local and/or regional) showing project location(s), discharge points with latitude and longitude, the receiving waterbody with identifying information, and the location of any treatment or disposal systems;

- g. A copy of the letter of acceptance or permit from the agency (e.g., municipality, water district, or other special district) responsible for the discharge location to allow the discharge into their drainage system, if applicable;
  - h. List of primary pollutants / parameters likely to be contained in the discharge;
  - i. Indication that a representative sample of the proposed effluent was taken and whether the screening level for any parameter analyzed was exceeded;
  - j. Indication of ability and method(s) to be employed to continuously comply with effluent limits and other requirements of this General Board Order;
  - k. Description of disposal system, BMPs, or other control strategies;
  - l. Categorical exception information (if applicable);
  - m. Explanation of why a discharge(s) to surface water is the only feasible method for disposing of the effluent, supported by a letter from the local publicly owned treatment works (POTW) stating that they cannot accept the discharge; and
  - n. The appropriate filing fee, plus applicable surcharge(s).
- 2. Sampling Requirements.** All dischargers are required to analyze the proposed discharge for the priority pollutants regulated under the California Toxics Rule (CTR) except for those dischargers approved for a categorical exception authorized by section 5.3 of the State Implementation Policy (SIP). Screening levels for these parameters are specified in Attachment B.

Attachment B also provides screening levels for discharges from water system-related activities, hydrostatic test water discharges and other low threat discharge activities and screening levels for pathogens and TSS for discharges to specific waterbodies.

Dischargers of wastewater from water system-related activities and other low threat discharge activities must also sample for total residual chlorine. If the discharge will be discharged to an impaired water body that is a water quality listed segment (WQLS) as specified in the latest Clean Water Act (CWA) section 303(d) list<sup>5</sup> (hereafter 303(d) List), the Discharger shall also analyze for the parameter(s) causing the impairment(s).

In addition, depending on the type of operation and water quality of the discharge, dischargers may be required to analyze their discharge for BOD, TSS, settleable solids, oil and grease, pH, turbidity, TDS, TPH, and hardness.

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<sup>5</sup> CWA Section 303(d) requires NPDES authorities to biannually publish lists of water quality segments that are impaired by one or more pollutants (i.e., not meeting designated uses). The latest CWA section 303(d) List may be found at [http://www.swrcb.ca.gov/water\\_issues/programs/tmdl/303d\\_lists2006\\_epa.shtml](http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml).

Also, applicants proposing to discharge low threat wastewaters to receiving waterbodies designated as REC-I or REC-II, segments of the Colorado River designated as REC-I and REC-II, and the New River must also sample the effluent, upstream receiving water, and downstream receiving water for a few additional parameters specified in the *Water Quality Control Plan for the Colorado River Basin* (hereinafter Basin Plan) and contained in Attachment B of this General Board Order.

If the discharge exceeds any of the applicable screening levels for non-priority pollutants or has the reasonable potential to cause or contribute to an exceedance of water quality standards in the receiving water, the Executive Officer will specify the applicable effluent limitations, as listed in section V, Effluent limitations and Discharge Specifications, and monitoring requirements as listed in Attachment E to which the Discharger is subject in the Notice of Applicability (NOA).

However, Dischargers, who exceed a screening level for one of the priority pollutants, will not be considered eligible for coverage under this General Board Order and will need to apply for an individual NPDES permit, except for those dischargers approved for a categorical exception authorized by section 5.3 of the SIP. If the results of analysis for a discharge indicates that priority pollutant concentrations in the discharge have the reasonable potential to contribute to the impairment, the discharge will not be authorized by this General Board Order (see section II.C below).

3. **Proposed Approach to Comply.** All dischargers are required to describe how they will comply with the effluent limitations in section V, Effluent limitations and Discharge Specifications, whether through BMPs or other control strategies.
4. **Best Management Practices or Control Strategy Plan.** All Dischargers are required in section VII.C.3 of this General Board Order to develop and implement a BMP or Control Strategy Plan and have this plan at the discharge location and available for inspection by the Regional Water Board. The elements of the Discharger's BMP Plan shall be consistent with the general guidance contained in the United States Environmental Protection Agency's (USEPA) *Guidance Manual for Developing Best Management Practices* (BMPs) (EPA 833-B-93-004), available from the EPA National Service Center for Environmental Publications website at <http://www.epa.gov/nscep/>. Dischargers may also consult the California Stormwater Best Management Practices Handbooks developed by the California Stormwater Quality Association, available at <http://www.cabmphandbooks.org/>, and other documents for guidance on addressing site-specific discharge situations. Dischargers exceeding the applicable screening levels for discharges from water system-related activities, hydrostatic test water discharges and other low threat discharge activities and screening levels for discharges of pathogens and TSS to specific waterbodies contained in Attachment B are required to submit the BMP or Control Strategy Plan with the NOI.
5. **Categorical Exceptions for Priority Pollutant Criteria and Objectives, if applicable.** Section 5.3 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State



Implementation Policy or SIP) allows the Regional Water Board to allow certain Dischargers short-term or seasonal exceptions from meeting priority pollutant criteria and objectives for discharges that are necessary to implement control measures that fulfill statutory requirements regarding drinking water. Dischargers applying for a categorical exception to the priority pollutant criteria and objectives, as authorized by section 5.3 of the SIP, must notify potentially affected public and governmental agencies and must submit the following information, with the completed NOI, to the Regional Water Board:

- a. A detailed description of the proposed action, including the proposed method of completing the action;
- b. A time schedule;
- c. A discharge and receiving water quality monitoring plan (before project initiation, during the project, and after project completion, with the appropriate quality assurance and quality control procedures);
- d. California Environmental Quality Act (CEQA) documentation;
- e. Contingency plans;
- f. Identification of alternate water supply (if needed); and
- g. Residual waste disposal plans.

To prevent unnecessary delays in taking emergency actions or to expedite the approval process for expected or routine activities that fall under categorical exceptions, the Discharger is advised to file, in advance of seeking Regional Water Board approval, the information required in items (a) through (g) above, to the extent possible.

The Regional Water Board will review the above submitted information and will determine whether the Discharger meets requirements of section 5.3 of the SIP for a categorical exception to the priority pollutant criteria. If the Regional Water Board determines that the Discharger does not meet these requirements to qualify for a categorical exception, then the Discharger will be required to analyze the proposed discharge for all of the CTR constituents listed in Tables B-2 and B-3 of Attachment B and to submit the analytical test results to the Regional Water Board.

Upon the Executive Officer's determination that the Discharger has submitted the information necessary to qualify under section 5.3 of the SIP for a categorical exception to the priority pollutant criteria, the submitted information will be made available for public review and comment for 30 days.

- i. If there is no objection after the public review and comment period, the Executive Officer will issue an authorization letter to the Discharger

making the approved application for categorical exception an enforceable part of the General Board Order.

- ii. If a written request for a hearing on the application for categorical exception is received within the 30-day public review and comment period, which includes the reason(s) the hearing is being requested (e.g., why the application for categorical exception is inadequate), the item will be placed on the next available Regional Water Board meeting agenda. Because of the need to comply with certain minimum noticing requirements, placement of this item on the agenda will be at least 30 days from the date when a hearing is requested plus the additional time necessary to follow the administrative procedures involved in preparing for the meeting.
- iii. If possible, the Regional Water Board staff will attempt to resolve the issues of concern by arranging a meeting with the Discharger and the interested person(s) requesting the hearing. If an agreement is reached in the meeting, a hearing may not be required. If the agreement reached requires significant changes to be made to the submitted application, however, a new public notice and comment period will be required. If an agreement is not reached with the interested person(s) requesting the hearing, the hearing will proceed as scheduled. After testimony is taken at the hearing, the Regional Water Board will decide whether permit coverage shall commence or whether the submitted application for categorical exception needs to be revised.

**6. Filing Fee and Applicable Surcharge.** In addition to the items specified in items II.A.1 through 5 above, Dischargers shall submit the current State Water Board adopted permit fee, plus the applicable surcharge. The current annual fees are as follows:

a. **Adopted Permit Fee.** The applicable adopted permit fee for discharges that require minimal or no treatment systems to meet limits and pose no significant threat to water quality (i.e., Category 3 discharges) is \$1,200.

b. **Surcharge.** The applicable surcharge is 21%.

Information concerning current permit fees may be found at <http://www.waterboards.ca.gov/resources/fees>.

**7.** Dischargers shall submit all required materials to the following address:

California Regional Water Quality Control Board  
Colorado River Basin Region  
73-720 Fred Waring Drive, Suite 100  
Palm Desert, CA 92260

## **B. Eligibility Requirements**

To be eligible for coverage under this General Board Order, the proposed discharge shall meet the following criteria:

1. Pollutant concentrations in the discharge shall not (i) cause, (ii) have the reasonable potential to cause, or (iii) contribute to an excursion above any applicable water quality objective;
2. A representative sample of the discharge shall not exceed the screening levels contained in Attachment B, or if the sample does exceed the screening levels, the Discharger is able to demonstrate compliance with the effluent limitations for constituents contained in section V, Effluent limitations and Discharge Specifications;
3. The discharge shall not include water added for the purpose of diluting pollutant concentrations; and
4. The Discharger is able to comply with all the terms and provisions of this General Board Order.

## **C. Exclusion of Coverage**

Dischargers seeking coverage under this General Board Order shall submit a completed NOI, together with the other applicable information as described in section II.A above, at least 45 days prior to the proposed initial discharge. Upon receipt of the NOI, the Executive Officer shall determine the applicability of this General Board Order to the discharge. If the discharge is deemed eligible for coverage, the Executive Officer shall issue a Notice of Applicability (NOA) to the Discharger specifying the terms and conditions of coverage under this General Board Order. Discharges shall not commence until after receiving the Executive Officer's written NOA. Where appropriate, the Executive Officer will write the NOA to be applicable to a project or an agency to eliminate the need for multiple NOAs to be issued when several discharges involving the same or substantially similar types of operations are conducted in one project or for one agency. The Executive Officer may terminate or revise the NOA at any time.

The Executive Officer of the Regional Water Board or the Regional Administrator of USEPA may require any person authorized to discharge wastes by this General Board Order to subsequently apply for and obtain an individual NPDES permit. Any interested person may petition the Executive Officer or the Regional Administrator of USEPA to take action in accordance with this finding. Cases where an individual permit may be required include the following:

1. The Discharger is not in compliance with the terms and conditions of this General Board Order or the NOA from the Executive Officer;
2. Technologies or practices have emerged that impact the control or abatement of pollutants in the discharge;

3. New or revised effluent limitation guidelines have been promulgated for one or more categories of discharges covered by this General Board Order;
4. Changes to the Basin Plan have been adopted that contain requirements applicable to the discharges covered by this General Board Order;
5. The requirements of general NPDES permits, as specified at section 122.28(a)<sup>6</sup> of Title 40 of the Code of Federal Regulations (CFR) are not met; and
6. The discharge is determined to adversely affect the water quality objectives of the receiving waters.

#### **D. Termination of Discharges**

1. If the Discharger wishes to terminate authorization under this General Board Order, the Discharger shall submit a completed Notice of Termination (NOT) to the Regional Water Board. The requirements of the NOT are contained in Attachment I. Termination from coverage shall occur on the date specified in the NOT unless the Regional Water Board notifies the Discharger otherwise within 30 days of receipt of the NOT. All discharges shall cease before the date of termination, and any discharges to surface waters on or after this date shall be considered in violation of the CWA unless such discharges are covered by another NPDES permit.
2. If the Regional Water Board issues the Discharger an individual NPDES permit or WDRs with more specific requirements, the applicability of this General Board Order to that Discharger shall be automatically terminated on the effective date of the individual NPDES permit or WDRs.
3. Dischargers authorized to discharge under this General Board Order and who have been granted a categorical exception to the priority pollutant criteria and objectives in the SIP (section 5.3) shall provide certification by a qualified biologist that the beneficial uses of the receiving water have been restored upon cessation of the discharge and prior to termination of the permit coverage.

#### **E. Transfer of Ownership**

In the event of any change in operational control or ownership of land or waste discharge facilities or project presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this General Board Order by letter, a copy of which shall be immediately forwarded to the Regional Water Board. The succeeding owner or operator shall then submit a new NOI to the Regional Water Board.

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<sup>6</sup> All further statutory references are to Title 40 of the Code of Federal Regulations unless otherwise indicated.

### III. FINDINGS

The Regional Water Board finds that:

#### A. Background

Individuals or entities proposing to discharge treated or untreated wastewaters containing few or no pollutants to waters of the United States must apply for coverage under this General Board Order **except** for those individuals or entities whose discharges are covered under other Regional Water Board- or State Water Board -wide General Permits or an individual permit. To obtain authorization to discharge, Dischargers must submit a completed NOI and associated documents, as described in section II.A above.

#### B. Discharge Description

This General Board Order covers wastewater discharges that pose little or no threat to water quality. Examples of the types of activities that have the potential to produce low threat discharges include, but are not limited to, the following:

1. **Water System-Related Activities.** This category includes discharges from water treatment (including water recycling) facilities, industries, and other entities that maintain and operate potable or non-potable water systems.

***Examples:***

- Maintenance and repairs to uncontaminated water supply wells, vessels, pipelines, tanks, reservoirs, and appurtenances;
- Hydrostatic testing of vessels, pipelines, tanks, reservoirs, and appurtenances (includes testing of newly constructed potable or non-potable pipelines, tanks, and vessels);
- Disinfection of wells, vessels, pipelines, tanks, reservoirs, and appurtenances;
- Discharges from water (including recycled water) systems resulting from designed or planned pressure releases, backwashing, flushing, or similar operational activities; and
- Fire hydrant testing or flushing.

2. **Dewatering Activities.** This category includes discharges from entities undertaking dewatering activities.

***Examples:***

- Treated or untreated groundwater from permanent or temporary dewatering operations to construct or protect pipelines and structures from groundwater infiltration or flotation; and
- Subterranean seepage dewatering, such as water extracted from crawl space pumps.

3. **Groundwater Extraction Activities.** This category includes discharges from entities that extract groundwater when investigating or cleaning up sites with soil and groundwater pollution or as a result of drilling, constructing, developing, and purging wells. Entities discharging VOC-contaminated groundwater are **not** eligible for coverage under this General Board Order; instead, they are eligible to discharge such wastewaters under Regional Water Board General Board Order No. R7-2009-0400, NPDES No. CAG917001 (or subsequent updated General Board Order) or an individual permit.

***Examples:***

- Groundwater pumped as an aid in the containment and/or cleanup of a contaminant plume or groundwater from cleanup sites;
- Groundwater generated from well drilling, construction and development purging of wells;
- Groundwater extracted during aquifer tests;
- Equipment wash water;
- Geothermal well testing; and
- Groundwater infiltration (e.g., seepage, foundation or footage drainage, seawater infiltration).

4. **Other Low Threat Discharge Activities.** This category includes discharges from public and private entities that engage in other miscellaneous activities that result in low threat discharges, such as those listed below.

***Examples:***

- Pilot treatment discharges (less than 2 years in duration and where water is removed, treated, and discharged into the same water body at points having similar water characteristics);
- Evaporative condensate (e.g., discharges associated with atmospheric condensates including refrigeration, air conditioners, compressor condensate, and cooling towers);
- Equipment washing and spill wash water;
- Discharges from drainage of swimming or ornamental pools, golf course lakes, and impounded water<sup>7</sup>; and
- Discharges that have the same types of waste. Although they pose a low threat to water quality, they still require WDRs since they are not covered by other State Water Board- or Regional Water Board-wide General Board Orders or an Individual Permit.

Entities engaging in activities that fall under one or more of the above categories, **but** that discharge exclusively to land for disposal, are **not** eligible for coverage under this General Board Order; instead, they may be covered under State Water Board General

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<sup>7</sup> For these types of water body discharges a full characterization of the wastewater for presence of pesticides, priority pollutants, wastes and/or other chemicals that have been applied to the wastewater needs to be provided. There must be a demonstration that there are no pollutants present at levels of concern.

Board Order No. 2003-003-DWQ, General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality.

- C. Legal Authorities.** This General Board Order is issued pursuant to Section 402 of the federal CWA and implementing regulations adopted by USEPA and Chapter 5.5, Division 7 of the California Water Code (commencing with Section 13370). It shall serve as a General NPDES Permit for point source discharges of low threat wastewaters to surface waters. This General Board Order also serves as WDRs pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260).

Title 40 CFR section 122.28 authorizes USEPA and approved states to issue general permits to regulate a point source category if the sources:

1. Involve the same or substantially similar types of operations;
2. Discharge the same types of waste;
3. Require the same effluent limitations or operating conditions;
4. Require the same or similar monitoring; and
5. Are more appropriately controlled under a general permit rather than under individual permits.

On September 22, 1989, USEPA granted the State of California, through the State Water Board and the Regional Water Boards, the authority to issue general NPDES permits pursuant to 40 CFR Parts 122 and 123.

- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this General Board Order based on readily available information and permit requirements for several similar discharges. The Fact Sheet (Attachment F) contains background information and rationale for this General Board Order's requirements. The Fact Sheet is hereby incorporated into this General Board Order and constitutes part of the Findings for this General Board Order. Attachments A through E and G through I are also incorporated into this General Board Order.

- E. California Environmental Quality Act.** Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, commencing with Section 21100 of the Public Resources Code, except requirements for "new sources"<sup>8</sup> as defined in the federal CWA. For any "new sources" compliance with CEQA must be achieved before an NOA for coverage under this General Board Order can be issued for the project.

The SIP at section 5.3 authorizes the Regional Water Board, after compliance with CEQA, to allow certain dischargers short-term or seasonal exceptions from meeting the

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<sup>8</sup> A "new source" is a discharge type for which USEPA has issued New Source Performance Standards. A "new source" does not mean a new discharge. See 40 CFR 122.2, 122.29, and Part 401.

priority pollutant criteria and objectives if the Regional Water Board determines the discharge is necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. Generally, discharges of potable water are made to fulfill California Health and Safety statutory requirements and to ensure a steady and safe drinking water supply to end-users. The potable water discharges under this General Board Order are mostly intermittent, short duration, low flow discharges that comply with California Department of Public Health Maximum Contaminant Levels, which are established at levels to protect public health and welfare. Therefore, existing and new potable water discharges, as qualified under this General Board Order, have been determined to pose no significant threat to water quality and to meet the conditions for a categorical exception under the SIP.

To satisfy the categorical exception requirements of section 5.3 of the SIP, dischargers seeking enrollment under this General Board Order will be required to submit project-specific information to the Executive Officer regarding the discharge and its water quality effects. The information required by the SIP is presented in the application requirements contained in section XIII of Attachment C.

Upon review of the submitted information as required in section 5.3 of the SIP and determination by the Regional Board's Executive Officer that it meets this criteria, the submitted information will be made available for public review and comment for 30 days.

- i. If there is no objection after the public review and comment period, the Executive Officer will issue an authorization letter to the Discharger making the approved application for categorical exception an enforceable part of the General Board Order.
- ii. If a written request for a hearing on the application for categorical exception is received within the 30-day public review and comment period, which includes the reason(s) the hearing is being requested (e.g., why the application for categorical exception is inadequate), the item will be placed on the next available Regional Water Board meeting agenda. Because of the need to comply with certain minimum noticing requirements, placement of this item on the agenda will be at least 30 days from the date when a hearing is requested plus the additional time necessary to follow the administrative procedures involved in preparing for the meeting.
- iii. If possible, the Regional Water Board staff will attempt to resolve the issues of concern by arranging a meeting with the applicant and the interested person(s) requesting the hearing. If an agreement is reached in the meeting, a hearing may not be required. If the agreement reached requires significant changes to be made to the submitted application, however, a new public notice and comment period will be required. If an agreement is not reached with the interested person(s) requesting the hearing, the hearing will proceed.



as scheduled. After testimony is taken at the hearing, the Regional Water Board will decide whether permit coverage shall commence or whether the submitted application for categorical exception needs to be revised.

**F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. Because there are no applicable Effluent Limitation Guidelines (technology-based requirements established by USEPA) for the low threat discharges authorized by this General Board Order, the technology-based requirements of this General Board Order have been established using Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F) accompanying this General Board Order.

**G. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and 40 CFR section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Title 40 CFR section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA Section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

**H. Water Quality Control Plans.** The Regional Water Board adopted the Basin Plan on November 17, 1993, which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (and including amendments adopted by the Regional Water Board to date). In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which establishes state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The existing and potential beneficial uses of the various surface waters (e.g., rivers, streams, lakes, canals / aqueducts, drains, springs, perennial and intermittent streams, and ephemeral streams or washes) that could be impacted by low threat discharges in the Colorado River Basin Region include one or more of the following:

- Agricultural supply (AGR)

- Aquaculture (AQUA)
- Cold freshwater habitat (COLD)
- Freshwater replenishment (FRSH)
- Ground water recharge (GWR)
- Hydropower generation (POW)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)
- Non-contact water recreation (REC-II)
- Preservation of rare, threatened, or endangered species (RARE)
- Warm freshwater habitat (WARM)
- Water contact recreation (REC-I)
- Wildlife habitat (WILD)

Requirements of this General Board Order implement the Basin Plan.

The 2006 303(d) List classifies the Imperial Valley Drains as impaired by five pesticides and one metal. Respectively, the pollutants include dieldrin, DDT, endosulfan, polychlorinated biphenyls (PCBs), toxaphene, and selenium. The Regional Water Board has not yet developed Total Maximum Daily Loads (TMDLs) for these parameters.<sup>9</sup> The Imperial Valley Drains were previously listed as impaired for sedimentation / siltation. USEPA has approved a sedimentation / siltation TMDL for the Imperial Valley Drains. The TMDL requires discharges from point sources not to exceed the TSS limits and corresponding mass loading rates as specified at 40 CFR 122 et seq. It also requires monitoring for TSS during each discharge event. Imperial Valley Drains discharge to two major water bodies: the New River and the Alamo River.

The New River is listed as impaired by the following chemical constituents: (1) toxic organics (1,2,4-trimethylbenzene, 1,2-dichlorobenzene, chloroform, cymene, and toluene); (2) pesticides (chlordane, chlorpyrifos, DDT, diazinon, dieldrin, PCBs, and toxaphene); (3) xylenes (m,p-xylenes and o-xylenes); (4) metals (copper and mercury); (5) nutrients; (6) dissolved oxygen; (7) toxicity; and (8) trash. TMDLs for these various parameters are under development by the Regional Water Board. The New River is also listed as impaired for bacteria and sediment / siltation. USEPA has approved the Regional Water Board's TMDLs for these parameters. These TMDLs establish waste load allocations (WLAs) for fecal coliform, E. coli, enterococci, and sediment. The established effluent limitations for fecal coliform, E. coli, enterococci, and TSS in this General Board Order comply with the WLAs established in the New River TMDLs. A Trash TMDL for the New River has been approved by the Regional Water Board and State Water Board, the Office of Administrative Law, and USEPA. The TMDL essentially establishes a prohibition on the discharge of any trash to the New River by point sources. This General Board Order prohibits discharges of trash to the New River.

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<sup>9</sup> The schedule for TMDL development may be found at  
[http://www.swrcb.ca.gov/water\\_issues/programs/tmdl/303d\\_lists2006\\_epa.shtml](http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml).

The Alamo River is listed as impaired by the following constituents: (1) pesticides (chlorpyrifos, DDT, dieldrin, PCBs, and toxaphene); (2) metals (selenium); and (3) sediment / silt. A sedimentation / siltation TMDL for the Alamo River has been approved by the Regional Water Board and the State Water Board, the Office of Administrative Law and USEPA. The requirements of this General Board Order are consistent with the WLAs contained in the sedimentation / siltation TMDL for the Alamo River.

The 303(d) List classifies segments of the Coachella Valley Storm Water Channel as impaired by pathogens and toxaphene. A TMDL has not yet been developed for toxaphene; however, a TMDL is under development for pathogens.

The Colorado River (Imperial Reservoir to California-Mexico border) is listed as impaired for selenium (metal). The Palo Verde Outfall Drain and Lagoon is listed as impaired for pathogens and DDT (pesticide). TMDLs have not yet been developed for these parameters.

Finally, the Salton Sea is listed as impaired by: (1) nutrients, (2) salt, and (3) metals (selenium). No TMDLs have been developed to date for the Salton Sea, although a nutrient TMDL is under development. Tributaries to the Salton Sea, including the Coachella Valley Storm Channel and Imperial Valley Drains, may be affected by the nutrient TMDL and any others developed for the Salton Sea. Furthermore, the Basin Plan establishes selenium objectives for tributaries to the Salton Sea.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- J. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the SIP. The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control.

Section 5.3 of the SIP authorizes the Regional Water Board, after compliance with CEQA, to allow certain dischargers short-term or seasonal exceptions from meeting the priority pollutant criteria and objectives if the Regional Water Board determines the discharge is necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code.

This General Board Order contains a process for Regional Water Board and public review for those Dischargers who submit the information required by section 5.3 of the SIP for categorical exception to the criteria and objectives in the CTR and SIP, as outlined in Attachment C.

In addition, as required by the SIP, Dischargers authorized to discharge under this General Board Order with an exception to the priority pollutant criteria and objectives must provide certification by a qualified biologist that the receiving water beneficial uses have been restored upon cessation of the discharge and prior to termination of the permit. Authorized discharges under this General Board Order meet fully comply with the requirements of the CTR and SIP.

- K. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the General Board Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This General Board Order does **not** include compliance schedules or interim effluent limitations.
- L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. (40 CFR 131.21; 65 Federal Register 24641, April 27, 2000). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- M. Stringency of Requirements for Individual Pollutants.** This General Board Order contains both technology-based requirements and WQBELs for individual pollutants. The technology-based requirements consist of the implementation of BMPs, which are discussed in section IV.B.2 of the Fact Sheet. This General Board Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutants WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures

for calculating the individual WQBELs for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to 40 CFR 131.21(c)(1). Collectively, this General Board Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

- N. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in section IV.D.5 of the Fact Sheet, the Regional Water Board expects minimal and insignificant impacts to water quality from the low threat discharges authorized by this General Board Order. The General Board Order requires all Dischargers to screen for the presence of toxics as required by the SIP, except for those dischargers approved for a categorical exception authorized by section 5.3 of the SIP, in addition to a few commonly occurring conventional and non-conventional pollutants. Based on the results of these analyses, the Regional Water Board will specify effluent limitations on a Discharger-specific basis. This General Board Order also requires Dischargers to develop and implement a BMP or Control Strategy Plan. Dischargers that exceed the screening level for one or more of the priority pollutants in Attachment B are not eligible for coverage under this General Board Order and must apply for coverage under an individual NPDES permit.
- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and the federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in detail in the Fact Sheet, the effluent limitations contained in General Board Order No. 98-300 to control discharges of hydrostatic test waters to surface waters have been maintained and is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- P. Endangered Species Act.** This General Board Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code Sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This General Board Order requires compliance with effluent limits, receiving water limits, and other requirements to protect

the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

**Q. Monitoring and Reporting.** Title 40 CFR section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and state requirements. This program is provided in Attachment E to this General Board Order.

**R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under Section 122.42. The Regional Water Board has also included in this General Board Order special provisions applicable to the Discharger. The rationale for the special provisions contained in this General Board Order is provided in the attached Fact Sheet.

**S. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsection VII.A.2.d of this General Board Order are included to implement state law only. These provisions / requirements are not required or authorized under the federal CWA; consequently, violations of these provisions / requirements are not subject to the enforcement remedies that are available for NPDES violations.

**T. Notification of Interested Parties.** The Regional Water Board has notified interested agencies and persons of its intent to prescribe WDRs for discharges of low threat wastewaters to surface waters of the United States and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this General Board Order.

**U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this General Board Order.

THEREFORE, IT IS HEREBY ORDERED, that in order to meet the provisions contained in Division 7 of the Water Code (commencing with Section 13000) and regulations adopted thereunder and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this General Board Order.

#### **IV. DISCHARGE PROHIBITIONS**

**A.** The discharge of treated wastewater at a location or in a manner different from that described by the Discharger in the NOI application or as authorized by the Executive Officer is prohibited.

- B. Except as allowed under the Standard Provisions for NPDES permits (hereinafter Standard Provisions), included as Attachment D, the bypass or overflow of untreated wastewater or wastes to waters of the State is prohibited.
- C. The Discharger shall not extract, accept or treat waste in excess of the BMP or Control Strategy Plan or disposal capacity of the system as specified in the Discharger's NOA from the Executive Officer.
- D. The discharge shall not cause degradation of any water supply unless in compliance with Resolution No. 68-16.
- E. The treatment or disposal of wastes from the facility or project site shall not cause pollution or nuisance as defined in Section 13050, subdivisions (l) and (m), respectively, of the California Water Code.
- F. The discharge of any substances in concentrations toxic to animal or plant life is prohibited.
- G. Discharges of trash to the New River are prohibited.

## V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

### A. Effluent Limitations

#### 1. Effluent Limitations – Applicable to All Low Threat Discharges

Discharges of wastewater from low threat discharges activities that exceeds the screening level in Attachment B for pH, TSS, oil and grease, and TPH shall be subject to the effluent limitations in Table 4 below. Other applicable effluent limitations from section V, Effluent limitations and Discharge Specifications shall be specified in the NOA from the Executive Officer.

**Table 4. Effluent Limitations for All Low Threat Discharges**

| Parameter                                   | Units          | Effluent Limitations |
|---|----------------|----------------------|
| Total Suspended Solids (TSS) <sup>1</sup>   | mg/L           | 95                   |
| Oil and Grease <sup>1</sup>                 | mg/L           | 25                   |
| pH <sup>1</sup>                             | standard units | Range 6 -9           |
| Total Petroleum Hydrocarbons <sup>1,2</sup> | mg/L           | 0.1                  |

<sup>1</sup> Not applicable to discharges from established water supply systems where parameter is not expected to exceed screening level.

<sup>2</sup> Applies only to dewatering/discharge operations near suspected petroleum hydrocarbon contaminated sites or when diesel or gasoline powered generator is used in dewatering/discharge operation.

## 2. Effluent Limitations – Applicable to Discharges from Water System-Related Activities and Other Low Threat Discharge Activities

Discharges of wastewater from water system-related activities and other low threat discharge activities that exceed the screening level for total residual chlorine contained in Attachment B shall be subject to the effluent limitations in Table 5 below. Other applicable effluent limitations from section V, Effluent limitations and Discharge Specifications, shall be specified in the NOA from the Executive Officer.

**Table 5. Effluent Limitations for Water System-Related and Other Low Threat Discharge Activities**

| Parameter                | Units <sup>1</sup> | Effluent Limitations |               |
|--------------------------|--------------------|----------------------|---------------|
|                          |                    | 1-Hour Average       | 4-Day Average |
| Chlorine, Total Residual | mg/L               | 0.019                | 0.011         |

<sup>1</sup> mg/L = milligrams per liter

## 3. Effluent Limitations – Applicable to Hydrostatic Test Water Discharges

Discharges of wastewater from hydrostatic test water that exceeds the screening level for the TSS, BOD, oil and grease, turbidity, settleable solids, TPH, and TRC contained in Attachment B shall be subject to the effluent limitations in Table 6 below. Other applicable effluent limitations from section V, Effluent limitations and Discharge Specifications, shall be specified in the NOA from the Executive Officer.

**Table 6. Effluent Limitations for Discharges from Hydrostatic Test Water Activities**

| Parameter  | Units | Effluent Limitations                                   |
|--|-------|--|
| Suspended Solids, Total                                  | mg/L  | 95   |
| BOD <sub>5</sub> @ 20° C or<br>CBOD <sub>5</sub> @ 20° C | mg/L  | 55 for BOD <sub>5</sub> or<br>50 for CBOD <sub>5</sub> |
| Oil and Grease   | mg/L  | 25   |
| Turbidity  | NTU   | 75   |
| Settleable Solids  | ml/L  | 0.2  |
| Total Petroleum Hydrocarbons                             | mg/L  | 0.1  |
| Chlorine Total Residual                                  | mg/L  | See Table 5  |

## 4. Effluent Limitations – Applicable to Discharges to Specific Waterbodies

Discharges of wastewater to an applicable waterbody listed below that exceeds the screening criteria for a parameter(s) contained in Attachment B shall be subject to the effluent limitations below. Effluent limitations in this section that are applicable to specific discharges or projects shall be specified in the NOA from the Executive Officer.

- a. **Discharges to Waters Designated as REC-I.** As identified in the NOA, the bacterial density in the wastewater effluent discharged to waters designated as REC-I shall not exceed the following values, as measured by the following bacterial indicator:



- i. ***Escherichia coli* (E. coli).** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a Most Probable Number (MPN) of 126 per 100 milliliters (mL), nor shall any sample exceed the maximum allowable bacterial density of a MPN of 400/100 mL.
- b. **Discharges to Waters Designated as REC-II.** As identified in the NOA, the bacterial density in the wastewater effluent discharged to waters designated as REC-II shall not exceed the following values, as measured by the following bacterial indicator:
  - i. **E. coli.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 630 / 100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 2,000/100 mL.
- c. **Discharges to Segments of the Colorado River Designated as REC-I.** As identified in the NOA, the bacterial density in the wastewater effluent discharged to segments of the Colorado River designated as REC-I shall not exceed the following values, as measured by the following bacterial indicator:
  - i. **E. coli.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 126/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 235/100 mL.
- d. **Discharges to Waters Segments of the Colorado River Designated as REC-II.** As identified in the NOA, the bacterial density in the wastewater effluent discharged to segments of the Colorado River designated as REC-II shall not exceed the following values, as measured by the following bacterial indicator:
  - i. **E. coli.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 630/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 1,175/100 mL.
- e. **Discharges to the New River.** As identified in the NOA, Dischargers that discharge to the New River shall comply with the following effluent limitations:
  - i. **Pathogens.** As identified in the NOA, the bacterial density in the wastewater effluent discharged to the New River shall not exceed the following values, as measured by the following bacterial indicators:
    - (a) **E. Coli.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 126/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 400/100 mL.

**(b) Enterococci.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 33/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 100/100 mL.

**(c) Fecal Coliform Organisms.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 200/100 mL, nor shall more than ten percent of the total samples during any 30-day period exceed a MPN of 400/100 mL.

**ii. Total Suspended Solids.** The annual average effluent concentration of TSS in the effluent discharged to the New River shall not exceed 200 mg/L<sup>10</sup>.

**B. Land Discharge Specifications – Not Applicable**

**C. Reclamation Specifications – Not Applicable**

**VI. RECEIVING WATER LIMITATIONS**

**A. Surface Receiving Water Limitations – Applicable to All Low Threat Discharges**

Receiving water limitations are based on the water quality objectives contained in the Basin Plan and are a required part of this General Board Order. All low threat discharges to any receiving waterbodies of the Colorado River Basin Region shall not cause the following:

1. Result in the concentration of dissolved oxygen in the receiving water to fall below 5.0 mg/L. When dissolved oxygen in the receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.
2. Result in the presence of oil, grease, floating material (liquids, solids, foam and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.
3. Result in the deposition of pesticides or combination of pesticides detectable in concentrations that adversely affects beneficial uses.
4. Result in discoloration in the receiving water that adversely affects beneficial uses.
5. Result in the discharge of biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
6. Result in an increase turbidity that adversely affects beneficial uses.

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<sup>10</sup> The TSS effluent limitation of 95 mg/L for TSS from hydrostatic test water discharges is more stringent and shall be in effect.

7. Result in the normal ambient pH of the receiving water to fall below 6.0 or exceed 9.0 units.
8. Result in altering the natural receiving water temperature that adversely affects beneficial uses.
9. Result in the deposition of material that causes nuisance or adversely affects beneficial uses.
10. Result in the discharge of an individual chemical or combination of chemicals in concentrations that adversely affect beneficial uses.
11. Result in toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
12. Result in an increase in taste or odor-producing substances that adversely affect beneficial uses.
13. Result in the violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board as required by the federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA Section 303 or amendments thereto, the Regional Water Board will revise and modify this Permit in accordance with such more stringent standards.

**B. Surface Receiving Water Limitations – Applicable to Discharges to Specific Waterbodies**

Receiving water limitations to specific waterbodies are based upon the water quality objectives contained in the Basin Plan and are a required part of this General Board Order. Discharges to applicable receiving water shall not result in the following:

1. **Total Dissolved Solids—New River, Alamo River, and Imperial Valley Drains.**  
Discharges to the New River, Alamo River, and the Imperial Valley Drains shall not cause the receiving water body to exceed an annual average of 4,000 mg/L and a daily maximum of 4,500 mg/L of total dissolved solids.
2. **Total Dissolved Solids—Coachella Valley Drains and Palo Verde Valley Drains.**  
Discharges to the Coachella Valley Drains and the Palo Verde Valley Drains shall not cause the receiving water body to exceed an annual average of 2,000 mg/L and a daily maximum of 2,500 mg/L of total dissolved solids.

## **C. Groundwater Limitations – Not Applicable**

## **VII. PROVISIONS**

### **A. Standard Provisions**

- 1. Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this General Board Order.
- 2. Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions:
  - a. The Discharger shall comply with all conditions of this General Board Order. Noncompliance constitutes a violation of the federal CWA and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification of Waste Discharge Requirements; or denial of a permit renewal application.
  - b. The Discharger shall ensure that all site-operating personnel are familiar with the content of this General Board Order and shall maintain a copy of this General Board Order at the site.
  - c. The Discharger shall immediately notify the Regional Water Board by phone at (760) 346-7491, the local health officer or directors of environmental health with jurisdiction over affected water bodies and the Office of Emergency Services by phone at (800) 852-7550 to report any noncompliance that may endanger human health or the environment as soon as: (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures.

Although states and Regional Water Boards do not have duties as first responders, it is important to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. The following notification requirements are to be implemented:

- i. During non-business hours, the Discharger shall leave a voice message on the Regional Water Board's voice recorder. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance; the anticipated time to achieve full compliance; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
  - d. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this General Board Order to the succeeding owner/operator and forward a copy of the transmittal letter to the Regional Water Board.

- e. Prior to any modifications to the facility, treatment system, or project site, which would result in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board and obtain revised requirements before any modifications are implemented.
- f. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
- g. This General Board Order does not authorize violation of any federal, state, or local laws or regulations.
- h. Failure to comply with provisions or requirements of this General Board Order, or violation of other applicable laws or regulations governing discharges from this facility, treatment system, or project site may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- i. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, instantaneous maximum effluent limitation, or receiving water limitation of this General Board Order, the Discharger shall notify the Regional Water Board by telephone (760) 346-7491 within 24 hours of having knowledge of such noncompliance and shall confirm this notification in writing within 5 days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.
- j. In accordance with section 1211 of the CWC, the Discharger shall obtain approval from the State Water Board's Division of Water Rights prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse.

## **B. Monitoring and Reporting Program Requirements**

The Discharger shall comply with the Monitoring and Reporting Program (MRP), and future revisions thereto, in Attachment E of this General Board Order. The Executive Officer will describe the MRP requirements listed in Attachment E that are applicable to the discharge(s) in the NOA.

## **C. Special Provisions**

### **1. Reopener Provisions**

- a.** This General Board Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this General Board Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this General Board Order as a result of the special condition monitoring data.
- b.** The Discharger shall submit data sufficient to determine if a WQBEL is required in the discharge permit as required under the SIP. It is the Discharger's responsibility to provide all information requested by the Regional Water Board for use in the analysis. The permit shall be reopened to establish WQBELs, if necessary.
- c.** This General Board Order may be modified, rescinded and reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include the promulgation of new regulations, modification of land application plans, or modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or the Regional Water Board, including revisions to the Basin Plan.
- d.** This General Permit may be re-opened and amended to include a list of entities that qualify and are granted a categorical exception to the priority pollutant criteria and objectives as outlined in section 5.3 of the SIP. This General Permit may also be re-opened and amended to revise the monitoring and reporting program to allow group or regional monitoring.
- e.** The CWA requires the Regional Water Board to modify, or terminate and reissue, the NPDES permit if a discharger must implement a pretreatment program. Public notice and a comment period are mandatory for these actions.
- f.** This General Board Order may be reopened and the Whole Effluent Toxicity (WET) Requirements, contained in section V of the MRP may be modified to address changes to USEPA or State Water Board policies or guidance regarding the testing or reporting requirements for WET testing.
- g.** If a statewide policy for total residual chlorine is adopted during the term of this General Board Order, this General Board Order may be reopened to include a revised reporting level to determine compliance with effluent limitations for total residual chlorine for low threat discharges consistent with the statewide policy.

- h.** TMDLs for pathogens, nutrients, salt, dissolved oxygen, VOCs, trash, pesticides, and selenium are to be developed by the Regional Water Board. The permit may be reopened and modified in the future to include appropriate requirements necessary to fully implement the approved TMDLs, if needed.
- i. Alamo River: Chlorpyrifos, DDT, Dieldrin, PCBs, Selenium, Toxaphene
  - ii. Coachella Valley Storm Water Channel (CVSWC)<sup>11</sup>: Pathogens, Toxaphene
  - iii. Colorado River (Imperial Reservoir to California-Mexico Border): Selenium
  - iv. Imperial Valley Drains: DDT (Barbara Worth Drain, Peach Drain, and Rice Drain), Dieldrin (Barbara Worth Drain and Fig Drain), Endosulfan (Peach Drain), PCBs (Central Drain from Meloland Road to the outlet into the Alamo River), Selenium (Upper Basin Portion of Colorado River), Toxaphene (Barbara Worth Drain, Peach Drain, and Rice Drain)
  - v. New River (Imperial County): 1,2,4-Trimethylbenzene, Chlordane, Chloroform, Chlorpyrifos, Copper, DDT, Diazinon, Dieldrin, Mercury, meta-para Xylenes, Nutrients, Organic Enrichment/Low Dissolved Oxygen, o-Xylenes, PCBs, p-Cymene, p-Dichlorobenzene/DCB, Pesticides, Selenium, Toluene, Toxaphene, Toxicity, Trash
  - vi. Palo Verde Outfall Drain and Lagoon: DDT, Pathogens
  - vii. Salton Sea: Nutrients, Salinity, Selenium

**2. Special Studies, Technical Reports and Additional Monitoring Requirements – Not Applicable**

**3. Best Management Practices (BMPs) or Control Strategies**

- a. Best Management Practices or Control Strategy Plan.** Each Discharger authorized under this General Board Order shall develop and implement a BMPs Plan or Control Strategy Plan that includes site-specific plans and procedures

<sup>11</sup> See Region 7 Basin Plan for applicable segments of the CVSWC.

implemented and/or to be implemented to prevent the generation and potential release of pollutants in the discharge to waters of the United States. This BMPs or Control Strategy Plan must be available for inspection by the Regional Water Board. Applicants must *develop and maintain a copy of* the BMPs or Control Strategy Plan at the discharge location, and all site-operating personnel shall be familiar with the contents of the BMPs or Control Strategy Plan. The BMPs Plan shall be consistent with the general guidance contained in the USEPA *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004). The Discharger may consult other handbooks for guidance, such as the California Stormwater Best Management Practice Handbooks developed by the California Stormwater Quality Association, available at <http://www.cabmphandbooks.org/>, to address the site-specific discharge situation. In particular, the Discharger shall perform a risk assessment of each area identified by the Discharger that will ensure proper operation and maintenance, prevent additional chemicals or other substances from being introduced into the discharge, and prevent the addition of pollutants from the other non-permitted process waters, spills, or other sources of pollutants. The necessary BMPs or control strategies shall be identified, developed, and implemented prior to the initiation of the discharge.

**4. Construction, Operation and Maintenance Specifications – Not Applicable**

**5. Special Provisions for Municipal Facilities – Not Applicable**

**6. Other Special Provisions**

- a. The Discharger may be required to submit technical reports as directed by the Regional Water Board's Executive Officer.
- b. The Discharger shall exclude from the facility, treatment system, or project any liquid or solid waste that could adversely affect operations or effluent quality. Any excluded liquid or solid wastes shall be disposed of in accordance with applicable regulations.

**7. Required Submittals and Reports**

- a. **Deliverables and Due Dates.** The Discharger shall comply with the following schedules for report submittal as summarized in Table 7:



**Table 7. Deliverables and Due Dates**

| Activity      | Description  | Due Date                |
|---------------|--|-------------------------|
| Annual Report | <p>The annual report shall include the following:</p> <ol style="list-style-type: none"> <li>1. The names and telephone numbers of persons to contact regarding the facility/project for emergency and routine situations.</li> <li>2. A statement certifying whether the current Best Management Practices (BMPs) or Control Strategy Plan, reflect the Discharger's operations as currently constructed and operated, and the date when the BMPs or Control Strategy Plan was last revised and last reviewed for adequacy.</li> <li>3. A summary report that includes the number, frequency, rate, and types of discharges to the receiving water(s).</li> <li>4. For those dischargers with a project specific NOA, a statement certifying that the discharges conducted in the previous year were in compliance with this General Board Order</li> <li>5. For those dischargers granted a categorical exception under 5.3 of the SIP, a statement certifying that the discharges conducted in the previous year were necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code and in compliance with this General Board Order.</li> </ol> | February 1,<br>annually |

## VIII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section V. Effluent Limitations and Discharge Specifications of this General Board Order will be determined as specified below:

**A. Total Residual Chlorine Effluent Limitations.** Monitoring for chlorine residual or for dechlorination agent residual in the effluent is an appropriate method for compliance determination. A positive residual dechlorination agent in the effluent indicates that chlorine is not present in the discharge, which demonstrates compliance with the effluent limitations. This type of monitoring can also be used to prove that some chlorine residual exceedances are false positives. For Dischargers that dechlorinate, field monitoring data showing either a positive dechlorination agent residual or a chlorine residual below the reporting level or prescribed limit (whichever is higher) is sufficient to show compliance with the total residual chlorine effluent limitations, as long as the instruments are maintained and calibrated in accordance with the manufacturer's recommendations.

Any excursion above the 1-hour average or 4-day average total residual chlorine effluent limitations and greater than or equal to a reporting level of 0.08 mg/L or a future reporting level included in a statewide policy adopted by the State Water Board is a violation.

If the Discharger conducts continuous monitoring and the Discharger can demonstrate, through data collected from a back-up monitoring system, that a chlorine spike recorded by the continuous monitor was not actually due to chlorine in the discharge, then any

excursion resulting from the recorded spike may not be considered an exceedance, but rather reported as a false positive.

- B. Average Monthly Effluent Limitation (AMEL).** If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter where no data is available to show compliance. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.
- C. Maximum Daily Effluent Limitation (MDEL).** If a daily discharge exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.
- D. Instantaneous Minimum Effluent Limitation.** If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately. For example, the results of two grab samples taken within a calendar day that are both lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation.
- E. Instantaneous Maximum Effluent Limitation.** If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately. For example, the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation.

**F. Water Quality-Based Effluent Limitations**

1. In accordance with section 2.4.5 of the SIP, compliance with WQBELs shall be determined as follows:
  - a. Dischargers shall be deemed out of compliance with an effluent limitation if the concentration of a priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported ML.
  - b. When determining compliance with an average monthly effluent limitation and more than one sample result is available in a month, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of Detected Not Quantified (DNQ) or Non-Detect (ND). In those

cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

- i. The data set shall be ranked from low to high, reported ND determinations lowest, DNQ determinations next, and followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- ii. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than a DNQ.

## **ATTACHMENT A – DEFINITIONS**

### **Acutely Toxic Conditions**

When used in the context of mixing zones, acutely toxic conditions refers to lethality that occurs to mobile aquatic organisms that move or drift through the mixing zone.

### **Annual Average Effluent Limitation**

The highest allowable average of monthly discharges over a calendar year, calculated as the sum of all monthly discharges measured during a calendar year divided by the number of monthly discharges measured during that year.

### **Arithmetic Mean ( $\mu$ )**

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \mu = \Sigma x / n \quad \text{where: } \Sigma x \text{ is the sum of the measured ambient water concentrations, and } n \text{ is the number of samples.}$$

### **Average Monthly Effluent Limitation (AMEL)**

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

### **Average Weekly Effluent Limitation (AWEL)**

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

### **Best Management Practices (BMPs)**

BMPs are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and non-point discharges including storm water. BMPs include structural and non-structural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

### **Best Professional Judgment (BPJ)-Based Limits**

Best Professional Judgment-based Limits are technology-based NPDES permit limits derived on a case-by-case basis using all reasonably available and relevant data for non-municipal facilities in the absence of effluent limitations guidelines (ELG).

### **Bioaccumulative**

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

### **Carcinogenic**

Pollutants are substances that are known to cause cancer in living organisms.

### **Categorical Exception**

A categorical exception as outlined in section 5.3 of the SIP is a short-term or seasonal exception from meeting the priority pollutant criteria/objectives if determined to be necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. Such categorical exceptions may also be granted for draining water supply reservoirs, canals, and pipelines for maintenance, for draining municipal storm water conveyances for cleaning or maintenance, or for draining water treatment facilities for cleaning or maintenance.

### **Coefficient of Variation (CV)**

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

### **Cooling water**

Cooling water means water used for contact or noncontact cooling, including water used for equipment cooling, evaporative cooling tower makeup, and dilution of effluent heat content. The intended use of the cooling water is to absorb waste heat rejected from the process or processes used, or from auxiliary operations on the facility's premises.

### **Criteria Continuous Concentration (CCC)**

Criteria Continuous Concentration equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (e.g., 4 days) without deleterious effects.

### **Criteria Maximum Concentration (CMC)**

Criteria Maximum Concentration equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (e.g., 1 hour) without deleterious effects.

### **Daily Discharge**

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

### **Detected, but Not Quantified (DNQ)**

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

**Dewatering**

Dewatering means to remove or drain the water from a tank, trench, and pipe or from the ground.

**Dilution Credit**

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

**Effluent Concentration Allowance (ECA)**

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as Waste Load Allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Enclosed Bays**

Not applicable.

**Estimated Chemical Concentration**

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Estuaries**

Not applicable.

**Evaporative Condensate**

Evaporative condensate is the atmospheric condensate from an evaporative cooling system. For the purposes of this General Board Order, this term does not encompass non-contact cooling water or water from open recirculating cooling water systems.

**Existing Discharger**

Any Discharger that is not a new Discharger. An existing Discharger includes an “increasing Discharger” (i.e., an existing Facility with treatment systems in place from its current discharge that is or will be expanding, upgrading, or modifying its existing permitted discharge after the effective date of this Policy).

**Geometric Mean**

Geometric mean is a measure of the central tendency of a data set that minimizes the effects of extreme values. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

Geometric Mean =  $(C_1 \times C_2 \times \dots \times C_n)^{1/n}$  where  $n$  = the number of days samples were collected during the period, and  $C$  = the concentration of bacteria (MPN/100 mL) found on each day of sampling.

### **Incompletely-Mixed Discharge**

A discharge that contributes to a condition that does not meet the meaning of a completely-mixed discharge condition.

### **Infeasible**

Infeasible means not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

### **Inland Surface Waters**

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

### **Instantaneous Maximum Effluent Limitation**

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

### **Instantaneous Minimum Effluent Limitation**

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

### **Load Allocation (LA)**

The portion of a receiving water's total maximum daily load that is allocated to one of its existing or future non-point sources of pollution or to natural background sources.

### **Maximum Daily Effluent Limitation (MDEL)**

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

### **Median**

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

### **Method Detection Limit (MDL)**

The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

### **Minimum Level (ML)**

The concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

### **Mixing Zone**

Not applicable.

### **New Discharger**

New Discharger includes any building, structure, facility, or installation from which there is, or may be, a discharge of pollutants, the construction of which commenced after the effective date of this Policy.

### **Non-contact cooling water**

Non-contact cooling water is water used for cooling that does not come into direct contact with any raw material, product, byproduct, or waste. It includes water generated from any cooling equipment blowdown or produced as a result of any non-contact cooling process through either a single pass (once through) or recirculating system. Most non-contact cooling water systems are also open recirculating cooling water systems (see definition below).

### **Non-potable water**

Water that may contain objectionable pollution, contamination, minerals, or infective agents and is considered unsafe and/or unpalatable for drinking.

### **Not Detected (ND)**

ND is a sample result that is less than the laboratory's MDL.

### **Notice of Applicability (NOA)**

The NOA is the written authorization for coverage under this General Board Order from the Executive Officer of the Regional Water Board. The NOA shall specify the applicable effluent limitations and monitoring requirements.

### **Notice of Intent (NOI)**

The NOI is a Discharger's application for coverage under this General Board Order. The NOI is required to contain all of the elements identified in Attachment C.

### **Notice of Termination (NOT)**

The NOT is a Discharger's notice to the Regional Water Board that the discharge to surface waters has been terminated and coverage under this General Board Order is no longer necessary. The requirements of the NOT are contained in Attachment I. Termination from coverage shall occur on the date specified in the NOT unless the Regional Water Board notifies the Discharger otherwise within 30 days of receipt of the NOT. All discharges shall cease before the date of termination, and any discharges to surface waters on or after this date shall be considered in violation of the CWA unless such discharges are covered by another NPDES permit.

### **Objectionable Bottom Deposits**

Objectionable Bottom Deposits are an accumulation of materials or substances on or near the bottom of a water body, which creates conditions that adversely impact aquatic life, human health, beneficial uses, or aesthetics. These conditions include, but are not limited to, the accumulation of pollutants in the sediments and other conditions that result in harm to benthic organisms, production of food chain organisms, or fish egg development. The presence of such deposits shall be determined by Regional Water Board(s) on a case-by-case basis.



### **Ocean Waters**

Not applicable.

### **Open Recirculating Cooling Water Systems**

Open recirculating cooling water systems use the same water repeatedly to cool process equipment. Heat absorbed from the process must be dissipated to allow reuse of the water. Cooling towers, spray ponds, and evaporative condensers are used for this purpose.

### **Persistent Pollutants**

Substances for which degradation or decomposition in the environment is nonexistent or very slow.

### **Pollutant Minimization Program (PMP)**

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code Section 13263.3(d), shall be considered to fulfill the PMP requirements.

### **Pollution Prevention**

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code Section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

### **Potable Water**

Water that is safe for drinking and cooking and is in compliance with the California Department of Public Health or local county health department regulations.

### **Public Entity**

Public Entity includes the Federal government or a state, county, city and county, city, district, public authority, or public agency.

### **Report of Waste Discharge**

For the purposes of this General Board Order, references to the Report of Waste Discharge (ROWD) shall include the Notice of Intent and any other application information submitted to the Regional Water Board.

### **Reporting Level (RL)**

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this General Board Order. The MLs included in this General Board Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

### **Satellite Collection System**

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

### **Source of Drinking Water**

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

### **Standard Deviation ( $\sigma$ )**

Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

$x$  is the observed value;

$\mu$  is the arithmetic mean of the observed values; and

$n$  is the number of samples.

### **State Implementation Policy (SIP)**

The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

### **Technology-Based Effluent Limitation**

A technology-based effluent limitation is a permit limit for a pollutant that is based on the capability of a treatment method to reduce the pollutant to a certain concentration.

### **Teratogenic**

Teratogenic pollutants are substances that are known to cause structural abnormalities or birth defects in living organisms.

### **Total Maximum Daily Load (TMDL)**

A TMDL is the sum of the individual waste load allocations and load allocations for receiving water. A margin of safety is included with the two types of allocations so that any additional loading, regardless of source, would not produce a violation of water quality standards.

**Toxicity Reduction Evaluation (TRE)**

Not applicable

**Waste Load Allocation (WLA)**

The portion of a receiving water's total maximum daily load that is allocated to one of its existing or future point sources of pollution.

**Whole Effluent Toxicity (WET)**

Not applicable.

## ATTACHMENT B – NOI SAMPLING REQUIREMENTS AND SCREENING LEVELS

### I. INSTRUCTIONS

This Attachment contains listings of the parameters Dischargers are to analyze as part of their application for coverage under this General Board Order. The sampling requirements that are applicable to all low threat discharges are presented in section II below, in Tables B-2 through B-4. The sampling requirements applicable to low threat discharges from water system-related activities and other low threat discharge activities are presented in section III below, in Table B-5 through B-6. The sampling requirements applicable to low threat discharges to specific waterbodies follow in section IV, in Tables B-7 through B-10.

The Discharger shall compare the results of all analyses to the corresponding screening levels in Tables B-2 to B-10, and submit them with the completed Notice of Intent (NOI). Any analyses performed for parameters without screening levels shall also be submitted to the Regional Water Quality Control Board (Regional Water Board) with the completed NOI.

The rationale for the screening levels in Tables B-2 through B-10 is provided in section IV.C.3.c. of the Fact Sheet (Attachment F) of this General Board Order. Table B-1 below provides an overview of the parameters to be analyzed as part of the application package.

**Table B-1. Overview of Sampling Requirements**

| Attachment B Table | Parameter(s) Covered <sup>1</sup>  | Sampling Location <sup>2</sup>   | Screening Levels Included in Table? |
|--------------------|--|----------------------------------|-------------------------------------|
| Table B-2          | Priority Pollutants  | EFF-001                          | Yes                                 |
| Table B-3          | Hardness-dependent Priority Pollutant Metals   | EFF-001 <sup>3</sup>             | Yes                                 |
| Table B-4          | TSS, Oil and Grease, pH, Total Dissolved Solids, Total Petroleum Hydrocarbons and Hardness | EFF-001 and RSW-001 <sup>3</sup> | Yes                                 |
| Table B-5          | Total Residual Chlorine  | EFF-001                          | Yes                                 |
| Table B-6          | Hydrostatic Test Water   | EFF-001                          | Yes                                 |
| Table B-7          | Any 303(d) Listed Parameters <sup>4</sup>  | EFF-001                          | No                                  |
| Tables B-8 & B-9   | <i>Eschericia coli</i> (E. coli)   | EFF-001                          | Yes                                 |
| Table-B-10         | E. coli, enterococci, fecal coliform organisms, and total suspended solids                 | EFF-001                          | Yes                                 |

| Attachment B<br>Table | Parameter(s) Covered <sup>1</sup> | Sampling<br>Location <sup>2</sup> | Screening Levels<br>Included in Table? |
|-----------------------|-----------------------------------|-----------------------------------|--|
|-----------------------|-----------------------------------|-----------------------------------|--|

- <sup>1</sup> The sampling requirements in terms of the parameters covered apply to all designated beneficial uses unless otherwise specified. MUN designated waters pertain to those receiving waters designated for municipal and domestic water supply, and Non-MUN designated waters pertain to those receiving waters designated for one or more of the other use categories. *Consult section III.H of the General Board Order for further information concerning designated use categories.*
- <sup>2</sup> EFF-001 = A location where a representative sample of the effluent can be collected prior to joining the receiving water.  
RSW-001 = Immediately upstream of the discharge point to obtain a representative sample of the background conditions of the upstream flow.  
RSW-002 = Downstream of the discharge point to obtain a representative sample of the combined flow.
- <sup>3</sup> Several of the priority pollutant metals are hardness dependent and require that a sample of the receiving water be analyzed for hardness.
- <sup>4</sup> If the proposed receiving water is listed as impaired by any parameter on the state's latest Clean Water Act section 303(d) List, then the Discharger shall analyze for the offending parameter(s). Consult the following Web site for the latest section 303(d) list:  
[http://www.swrcb.ca.gov/water\\_issues/programs/tmdl/303d\\_lists2006\\_epa.shtml](http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml).

Dischargers shall analyze all applicable pollutants in this Attachment in accordance with the analytical methods and other requirements specified in Part 136 of Title 40 of the *Code of Federal Regulations (CFR)* and in accordance with section I of the Monitoring and Reporting Program (Attachment E) of this General Board Order.

For priority pollutant constituents with applicable water quality criteria, detection limits shall be below the screening level. If the lowest minimum level (ML) published in Appendix 4 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Plan or SIP) is not below the screening level, the detection limit shall be the lowest ML.

Detection for the purposes of the priority pollutants with applicable water quality criteria means a sample result that is greater than or equal to the detection limit. Sample results less than the ML, but greater than or equal to the detection limit, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported, and shall be used to compare to the applicable screening level for purposes of determining whether effluent limitations are necessary.

## II. ANALYSES REQUIRED OF ALL DISCHARGERS

- A. Priority Pollutants.** All Dischargers seeking authorization to discharge under this General Board Order shall sample and analyze the proposed effluent for the priority pollutants contained in Tables B-2 and B-3, except those dischargers approved for a categorical exception as authorized by section 5.3 of the SIP. The results of the analyses shall be compared to the corresponding screening levels and shall be submitted as part of the NOI. Dischargers of wastewater from water system-related activities may submit the summary results of monitoring for applicable parameters reported in their annual Consumer Confidence Report as required by Title 22, Division 4, Chapter 15, Article 20 of the California Code of Regulations to satisfy the sampling requirements contained in Tables B-2 and/or B-3. Dischargers of wastewater from water system-related activities that have been granted a waiver for the monitoring

requirements contained in Title 22, Division 4, Chapter 15 of the California Code of Regulations from the California Department of Public Health, Division of Drinking Water and Environmental Management are exempt from the sampling requirements for the applicable parameter(s) or test methods contained in Tables B-2 and/or B-3. A copy of the waiver must be submitted with the NOI.

**Table B-2. Screening Levels for Priority Pollutants**

| Parameter                         | Screening Levels <sup>1,2</sup>           |   |
|-----------------------------------|---|---|
|                                   | MUN Designated Waters (µg/L) <sup>3</sup> | Non-MUN Designated Waters (µg/L) <sup>3</sup> |
| <b>Metals and Other Compounds</b> |   |   |
| Antimony, Total Recoverable       | 14  | 4,300   |
| Arsenic, Total Recoverable        | 150                                       | 150   |
| Beryllium, Total Recoverable      | 4   | 4   |
| Cadmium, Total Recoverable        | See Table B-3                             |   |
| Chromium (III)                    | See Table B-3                             |   |
| Chromium (VI)                     | 11  | 11  |
| Copper, Total Recoverable         | See Table B-3                             |   |
| Lead, Total Recoverable           | See Table B-3                             |   |
| Mercury, Total Recoverable        | 0.050                                     | 0.051   |
| Nickel, Total Recoverable         | See Table B-3                             |   |
| Selenium, Total Recoverable       | 5.0                                       | 5.0   |
| Silver, Total Recoverable         | See Table B-3                             |   |
| Thallium, Total Recoverable       | 1.7                                       | 6.3   |
| Zinc, Total Recoverable           | See Table B-3                             |   |
| Cyanide, Free (as CN)             | 5.2                                       | 5.2   |
| Asbestos                          | 7 MFL <sup>5</sup>                        | 4   |
| 2,3,7,8-TCDD                      | $1.3 \times 10^{-8}$                      | $1.4 \times 10^{-8}$                          |
| <b>Volatile Organic Compounds</b> |   |   |
| Acrolein                          | 320                                       | 780   |
| Acrylonitrile                     | 0.059                                     | 0.66  |
| Benzene                           | 1.2                                       | 71  |
| Bromoform                         | 4.3                                       | 360   |
| Carbon Tetrachloride              | 0.25                                      | 4.4   |
| Chlorobenzene                     | 680                                       | 21,000  |
| Chlorodibromomethane              | 0.41                                      | 34  |
| Chloroethane                      | 4   | 4   |
| 2-Chloroethylvinyl ether          | 4   | 4   |
| Chloroform                        | 4   | 4   |

| Parameter                                | Screening Levels <sup>1,2</sup>              |  |
|--|--|--|
|  | MUN Designated Waters<br>(µg/L) <sup>3</sup> | Non-MUN Designated<br>Waters (µg/L) <sup>3</sup> |
| Dichlorobromomethane                     | 0.56   | 46   |
| 1,1-Dichloroethane                       | 4  | 4  |
| 1,2-Dichloroethane                       | 0.38   | 99   |
| 1,1-Dichloroethylene                     | 0.057  | 3.2  |
| 1,2-Trans-Dichloroethylene               | 700  | 140,000  |
| 1,2-Dichloropropane                      | 0.52   | 39   |
| 1,3-Dichloropropylene                    | 10   | 1,700  |
| Ethylbenzene                             | 3,100  | 29,000   |
| Methyl Bromide                           | 48   | 4,000  |
| Methyl Chloride                          | 4  | 4  |
| Methylene Chloride                       | 4.7  | 1,600  |
| 1,1,2,2-Tetrachloroethane                | 0.17   | 11   |
| Tetrachloroethylene                      | 0.8  | 8.85   |
| Toluene                                  | 6,800  | 200,000  |
| 1,1,1-Trichloroethane                    | 4  | 4  |
| 1,1,2-Trichloroethane                    | 0.6  | 42   |
| Trichloroethylene                        | 2.7  | 81   |
| Vinyl Chloride                           | 2  | 525  |
| <b><i>Acid Extractible Compounds</i></b> |  |  |
| 3-Methyl-4-Chlorophenol                  | 4  | 4  |
| 2-Chlorophenol                           | 120  | 400  |
| 2,4-Dichlorophenol                       | 93   | 790  |
| 2,4-Dimethylphenol                       | 540  | 2,300  |
| 2-Methyl-4,6-Dinitrophenol               | 13.4   | 765  |
| 2,4-Dinitrophenol                        | 70   | 14,000   |
| 2-Nitrophenol                            | 4  | 4  |
| 4-Nitrophenol                            | 4  | 4  |
| Pentachlorophenol                        | 0.28   | 8.2  |
| Phenol                                   | 21,000                                       | 4,600,000  |
| 2,4,6-Trichlorophenol                    | 2.1  | 6.5  |
| <b><i>Base Neutral Compounds</i></b>     |  |  |
| Acenaphthene                             | 1,200  | 2,700  |
| Acenaphthylene                           | 4  | 4  |
| Anthracene                               | 9,600  | 110,000  |
| Benzidine                                | 0.00012                                      | 0.00054  |
| Benzo(a)Anthracene                       | 0.0044                                       | 0.049  |

| Parameter                   | Screening Levels <sup>1,2</sup>              |  |
|-----------------------------|--|--|
|                             | MUN Designated Waters<br>(µg/L) <sup>3</sup> | Non-MUN Designated<br>Waters (µg/L) <sup>3</sup> |
| Benzo(a)Pyrene              | 0.0044                                       | 0.049  |
| Benzo(b)Fluoranthene        | 0.0044                                       | 0.049  |
| Benzo(ghi)Perylene          | 4  | 4  |
| Benzo(k)Fluoranthene        | 0.0044                                       | 0.049  |
| Bis(2-chloroethoxyl)Methane | 4  | 4  |
| Bis(2-Chloroethyl)Ether     | 0.031  | 1.4  |
| Bis(2-Chloroisopropyl)Ether | 1,400  | 170,000  |
| Bis(2-Ethylhexyl)Phthalate  | 1.8  | 5.9  |
| 4-Bromophenyl Phenyl Ether  | 4  | 4  |
| Butylbenzyl Phthalate       | 3,000  | 5,200  |
| 2-Chloronaphthalene         | 1,700  | 4,300  |
| 4-Chlorophenyl Phenyl Ether | 4  | 4  |
| Chrysene                    | 0.0044                                       | 0.049  |
| Dibenzo(a,h)Anthracene      | 0.0044                                       | 0.049  |
| 1,2-Dichlorobenzene         | 2,700  | 17,000   |
| 1,3-Dichlorobenzene         | 400  | 2,600  |
| 1,4-Dichlorobenzene         | 400  | 2,600  |
| 3,3'-Dichlorobenzene        | 0.04   | 0.077  |
| Diethyl Phthalate           | 23,000                                       | 120,000  |
| Dimethyl Phthalate          | 313,000                                      | 2,900,000  |
| di-n-Butyl Phthalate        | 2,700  | 12,000   |
| 2,4-Dinitrotoluene          | 0.11   | 9.1  |
| 2,6-Dinitrotoluene          | 4  | 4  |
| 1,2-Diphenylhydrazine       | 0.040  | 0.54   |
| Di-n-Octyl Phthalate        | 4  | 4  |
| Fluoranthene                | 300  | 370  |
| Fluorene                    | 1,300  | 14,000   |
| Hexachlorobenzene           | 0.00075                                      | 0.00077  |
| Hexachlorobutadiene         | 0.44   | 50   |
| Hexachlorocyclopentadiene   | 240  | 17,000   |
| Hexachloroethane            | 1.9  | 8.9  |
| Indeno(1,2,3-cd)Pyrene      | 0.0044                                       | 0.049  |
| Isophorone                  | 8.4  | 600  |
| Naphthalene                 | 4  | 4  |
| Nitrobenzene                | 17   | 1,900  |
| N-Nitrosodimethylamine      | 0.00069                                      | 8.1  |



| Parameter                 | Screening Levels <sup>1,2</sup>              |  |
|---------------------------|--|--|
|                           | MUN Designated Waters<br>(µg/L) <sup>3</sup> | Non-MUN Designated<br>Waters (µg/L) <sup>3</sup> |
| N-Nitrosodi-n-propylamine | 0.005  | 1.4  |
| N-Nitrosodiphenylamine    | 5.0  | 16   |
| Phenanthrene              | 4  | 4  |
| Pyrene                    | 960  | 11,000   |
| 1,2,4-Trichlorobenzene    | 4  | 4  |
| <b>Pesticides</b>         |  |  |
| Aldrin                    | 0.00013                                      | 0.00014  |
| alpha-BHC                 | 0.0039                                       | 0.013  |
| beta-BHC                  | 0.014  | 0.046  |
| delta-BHC                 | 4  | 4  |
| gamma-BHC                 | 0.019  | 0.063  |
| Chlordane                 | 0.00057                                      | 0.00059  |
| 4,4'-DDT                  | 0.00059                                      | 0.00059  |
| 4,4'-DDE                  | 0.00059                                      | 0.00059  |
| 4,4'-DDD                  | 0.00083                                      | 0.00084  |
| Dieldrin                  | 0.00014                                      | 0.00014  |
| alpha-Endosulfan          | 0.056  | 0.056  |
| beta-Endosulfan           | 0.056  | 0.056  |
| Endosulfan Sulfate        | 110  | 240  |
| Endrin                    | 0.036  | 0.036  |
| Endrin Aldehyde           | 0.76   | 0.81   |
| Heptachlor                | 0.00021                                      | 0.00021  |
| Heptachlor Epoxide        | 0.00010                                      | 0.00011  |
| PCBs, sum of <sup>6</sup> | 0.00017                                      | 0.00017  |
| Toxaphene                 | 0.0002                                       | 0.0002   |

| Parameter | Screening Levels <sup>1,2</sup>              |  |
|-----------|--|--|
|           | MUN Designated Waters<br>(µg/L) <sup>3</sup> | Non-MUN Designated<br>Waters (µg/L) <sup>3</sup> |

<sup>1</sup> Dischargers approved for a categorical exception for meeting the priority pollutant criteria/objectives as authorized by section 5.3 of the SIP are not required to perform wastewater sampling for priority pollutants contained in Table B-2 and B-3.

<sup>2</sup> The screening levels for MUN designated waters were established based on the California Toxics Rule (CTR) criteria for the protection of freshwater aquatic life or for the protection of human health for consumption of water and organisms, whichever was the most stringent. The screening levels for Non-MUN designated waters were established based on CTR criteria for the protection of freshwater aquatic life or CTR criteria for the protection of human health for the consumption of organisms only, whichever was the most stringent.

<sup>3</sup> µg/L = micrograms per liter

<sup>4</sup> Priority pollutants for which no applicable CTR criteria for the protection of human health or aquatic life exist include asbestos (non-MUN only), beryllium, chloroethane, 2-chloroethylvinyl ether, chloroform, 1,1-dichloroethane, methyl chloride, 1,1,1-trichloroethane, 2-nitrophenol, 4-nitrophenol, 3-methyl-4-chlorophenol, acenaphthylene, benzo(ghi)perylene, bis(2-chloroethoxy)methane, 4-bromophenyl phenyl ether, 4-chlorophenyl phenyl ether, 2,6-dinitrotoluene, di-n-octyl phthalate, naphthalene, phenanthrene, 1,2,4-trichlorobenzene, delta-BHC, and asbestos (non-MUN only). Therefore, screening levels for those parameters have not been established and analysis for these parameters is not required.

<sup>5</sup> MFL = million fibers per liter

<sup>6</sup> The screening level applies to the sum of Aroclors 1242, 1254, 1221, 1232, 1248, 1280, and 1016.

**Table B-3. Screening Levels for Hardness-Dependent Priority Pollutant Metals**

| Parameter                  | Units | Hardness in mg/L (H) <sup>3</sup> |                                |                                |                                |
|----------------------------|-------|-----------------------------------|--------------------------------|--------------------------------|--------------------------------|
|                            |       | H < 200                           | 200 ≤ H < 300                  | 300 ≤ H < 400                  | 400 ≤ H                        |
|                            |       | Screening Level <sup>1,2</sup>    | Screening Level <sup>1,2</sup> | Screening Level <sup>1,2</sup> | Screening Level <sup>1,2</sup> |
| Cadmium, Total Recoverable | µg/L  | 2.5                               | 5.1                            | 6.6                            | 7.3                            |
| Chromium (III)             | µg/L  | 207                               | 438                            | 577                            | 644                            |
| Copper, Total Recoverable  | µg/L  | 9.3                               | 20                             | 27                             | 31                             |
| Lead, Total Recoverable    | µg/L  | 3.2                               | 10                             | 16                             | 19                             |
| Nickel, Total Recoverable  | µg/L  | 52                                | 113                            | 151                            | 169                            |
| Silver, Total Recoverable  | µg/L  | 4.1                               | 20                             | 35                             | 44                             |
| Zinc, Total Recoverable    | µg/L  | 120                               | 260                            | 346                            | 388                            |

<sup>1</sup> Dischargers approved for a categorical exception for meeting the priority pollutant criteria/objectives as authorized by section 5.3 of the SIP are not required to perform wastewater sampling for priority pollutants and hardness contained in Table B-2 and B-3.

<sup>2</sup> The screening levels apply to discharges to both MUN and non-MUN waters and were established based on the CTR criteria for the protection of freshwater aquatic life, which are more stringent than CTR criteria for both the protection of human health for consumption of water and organisms and protection of human health for the consumption of organisms only.

<sup>3</sup> Dischargers shall also analyze the effluent and the receiving water for hardness.

**B. TSS, Oil and Grease, pH, Total Dissolved Solids, Total Petroleum Hydrocarbons and Hardness.** All Dischargers seeking authorization to discharge under this General Board Order shall sample and analyze a representative effluent sample for the constituents identified in Table B-4. The results of the analyses shall be submitted with the completed NOI.

**Table B-4. Screening Levels for TSS, Oil and Grease, pH, and Total Petroleum Hydrocarbons**

| Parameter                                   | Units          | Screening Level |
|---|----------------|-----------------|
| Total Suspended Solids (TSS) <sup>1</sup>   | mg/L           | 95              |
| Oil and Grease <sup>1</sup>                 | mg/L           | 25              |
| pH <sup>1</sup>                             | standard units | Range 6 -9      |
| Total Petroleum Hydrocarbons <sup>1,2</sup> | mg/L           | 0.1             |

<sup>1</sup> Not applicable to discharges from established water supply systems where parameter is not expected to exceed screening level.

<sup>2</sup> Applies only to dewatering/discharge operations near suspected petroleum hydrocarbon contaminated sites or when diesel or gasoline powered generator is used in dewatering/discharge operations.

### III. ANALYSES REQUIRED FOR DISCHARGES FROM WATER SYSTEM-RELATED ACTIVITIES AND OTHER LOW THREAT DISCHARGE ACTIVITIES

**A. Total Residual Chlorine.** All Dischargers of wastewater from water system-related activities and other low threat discharge activities seeking authorization to discharge under this General Board Order shall sample and analyze a representative effluent sample for total residual chlorine or dechlorinating agent and compare the result to the screening level contained in Table B-5 below. Dischargers of wastewater from dewatering activities and groundwater extraction activities that do not add or use chlorine in the discharge are not required to sample for total residual chlorine.

**Table B-5 Screening Level for Total Residual Chlorine**

| Parameter                | Units | Screening Level    |
|--------------------------|-------|--------------------|
| Chlorine, Total Residual | mg/L  | 0.011 <sup>1</sup> |

<sup>1</sup> Total residual chlorine shall be analyzed with a method sensitive to and accurate at a reporting level of 0.08 mg/L, or any more stringent reporting level included in a final statewide policy or standard for total residual chlorine. Any excursion above the screening level and greater than or equal to a reporting level of 0.08 mg/L or a future reporting level included in a statewide policy adopted by the State Water Board shall be considered an exceedance of the screening level.

### IV. ANALYSES REQUIRED FOR HYDROSTATIC TEST WATER DISCHARGES

**A. Hydrostatic Water Discharges.** All Dischargers of wastewater from hydrostatic test water discharges shall sample and analyze a representative effluent sample and compare the results to the screening level contained in Table B-6 below. Dischargers of wastewater that do not add or have chlorine in the discharge are not required to sample for total residual chlorine.

**Table B-6 Screening Level for Hydrostatic Test Water Discharges**

| Parameter  | Units | Screening Level  |
|--|-------|--|
| Suspended Solids, Total                                  | mg/L  | 95   |
| BOD <sub>5</sub> @ 20° C or<br>CBOD <sub>5</sub> @ 20° C | mg/L  | 55 for BOD <sub>5</sub> or<br>50 for CBOD <sub>5</sub> |
| Oil and Grease   | mg/L  | 25   |
| Turbidity  | NTU   | 75   |
| Settleable Solids  | ml/L  | 0.2  |
| Chlorine, Total Residual                                 | mg/L  | 0.011 <sup>1</sup>                                     |

<sup>1</sup> Total residual chlorine shall be analyzed with a method sensitive to and accurate at a reporting level of 0.08 mg/L, or any more stringent reporting level included in a final statewide policy or standard for total residual chlorine. Any excursion above the screening level and greater than or equal to a reporting level of 0.08 mg/L or a future reporting level included in a statewide policy adopted by the State Water Board shall be considered an exceedance of the screening level.

## V. ANALYSES REQUIRED FOR DISCHARGES TO SPECIFIC WATERBODIES AND WATERBODIES WITH SPECIFIC DESIGNATED USES

**A. Section 303(d) Parameters.** If the proposed receiving water is listed as impaired on the latest Clean Water Act section 303(d) List, the Discharger shall analyze a representative sample of the discharge for the parameter(s) causing the impairment and submit the results with the completed NOI. The latest section 303(d) List may be found at [http://www.swrcb.ca.gov/water\\_issues/programs/tmdl/303d\\_lists2006\\_epa.shtml](http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml). The 2006 section 303(d) List for the Colorado River Basin includes the following impaired waters:

**Table B-7. 2006 Section 303(d) Parameters**

| Impaired Waterbody  | Parameter   |
|---|---|
| Alamo River   | Chlorpyrifos, DDT, dieldrin, polychlorinated biphenyls (PCBs), selenium, and toxaphene  |
| Coachella Valley Storm Water Channel (CVSWC) <sup>12</sup>      | Pathogens, toxaphene  |
| Colorado River (Imperial Reservoir to California-Mexico Border) | Selenium  |
| Imperial Valley Drains  | DDT, dieldrin, endosulfan, PCBs, selenium, toxaphene  |
| New River (Imperial County)                                     | 1,2,4-Trimethylbenzene, chlordane, chloroform, chlorpyrifos, copper, DDT, diazinon, dieldrin, mercury, meta-para xylenes, nutrients, organic enrichment/low dissolved oxygen, o-xylenes, PCBs, p-cymene, p-dichlorobenzene/DCB, pesticides, selenium, toluene, toxaphene, toxicity, and trash |
| Palo Verde Outfall Drain and Lagoon                             | DDT and pathogens   |

<sup>12</sup> See Region 7 Basin Plan for applicable segments of the CVSWC.

| Impaired Waterbody | Parameter                         |
|--------------------|-----------------------------------|
| Salton Sea         | Nutrients, salinity, and selenium |

**B. Waterbody or Designated Use-Specific Analyses.** The *Water Quality Control Plan, Colorado River Basin* (the Basin Plan) establishes receiving water limitations for the discharge of certain pollutants to specific waterbodies. Dischargers proposing to discharge low threat wastewater under this General Board Order to waterbodies designated as REC-I or REC-II, segments of the Colorado River designated as REC-I or REC-II, or the New River shall analyze a representative sample of the effluent for the parameters indicated in Tables B-8 through B-10 below, as applicable, and compare the results to the screening levels noted. The Discharger shall submit the results of all analyses performed with the completed NOI.

**Table B-8. Screening Level for E. coli for Discharges to Waterbodies Designated as REC-I and Segments of the Colorado River Designated as REC-I**

| Parameter                         | Units      | Screening Level |
|-----------------------------------|------------|-----------------|
| <i>Escherichia coli</i> (E. coli) | MPN/100 mL | 126             |

**Table B-9. Screening Level for E. coli for Discharges to Waterbodies Designated as REC-II and Segments of the Colorado River Designated as REC-II**

| Parameter | Units      | Screening Level |
|-----------|------------|-----------------|
| E. coli   | MPN/100 mL | 630             |

**Table B-10. Screening Level for E. coli, Enterococci, Fecal Coliform Organisms, and Total Suspended Solids for Discharges to the New River**

| Parameter                | Units      | Screening Level |
|--------------------------|------------|-----------------|
| E. coli                  | MPN/100 mL | 126             |
| Enterococci              | MPN/100 mL | 33              |
| Fecal Coliform Organisms | MPN/100 mL | 200             |
| Total Suspended Solids   | mg/L       | 95 <sup>1</sup> |

<sup>1</sup> The TSS effluent limitation of 95 mg/L for TSS from hydrostatic test water discharges is more stringent and shall be in effect

## ATTACHMENT C – NOTICE OF INTENT

### NOTICE OF INTENT TO COMPLY WITH THE TERMS OF GENERAL BOARD ORDER NO. R7-2009-0300 FOR DISCHARGES OF LOW THREAT WASTEWATERS TO SURFACE WATER

To obtain coverage under this General Board Order, which also serves as a National Pollutant Discharge Elimination System (NPDES) Permit, the Discharger must submit a complete application, including the following requirements. Additional information may be requested by the Regional Water Board for specific sites / projects.

#### I. REASON FOR FILING

|  |  |  |
|--|--|--|
| New Discharge(s)<br><br><input type="checkbox"/> | NPDES Permit Reissuance or<br>amendments to existing NOI<br><br><input type="checkbox"/> | Change from Individual Permit to<br>General Permit<br><br><input type="checkbox"/> |
|--|--|--|

#### II. EXISTING PERMITS/REQUIREMENTS (IF APPLICABLE)

|  |
|--|
| List any active Board Orders or Permits adopted by this Regional Water Board for current discharge(s). |
| 1. Board Order No. _____   |
| 2. NPDES Permit(s) _____   |

#### III. PROJECT / AGENCY NAME AND PROJECT / AGENCY SITE ADDRESS

**INFORMATION** *(If additional projects are involved, provide information in a supplemental letter.)*

|  |                           |                            |       |
|--|---------------------------|----------------------------|-------|
| Project/Agency Name                        |                           |                            |       |
| Project Site or Agency Address             |                           |                            |       |
| Mailing Address for Project Site or Agency |                           |                            |       |
| City                                       | State                     | Zip                        | Phone |
| Contact Person for Project or Agency       | Phone number for Contact  | Email for Contact          |       |
| For specific project provide the following |                           |                            |       |
| 1. Assessor's Parcel Numbers:<br>Facility: | 2. Latitude:<br>Facility: | 3. Longitude:<br>Facility: |       |

#### IV. CONTRACTOR/OPERATOR *(If the discharger is not a public agency and a contractor or operator is applying for permit, complete this section, if necessary provide additional information in a supplemental letter.)*

|                           |   |  |   |  |   |
|---------------------------|---|--|---|--|---|
| Name                      |   |  |   |  |   |
| Mailing Address           |   |  |   |  |   |
| City                      | State                                     | Zip  | License Number                                      |  |   |
| Contact Person            | Contractor<br><input type="checkbox"/>    |  | Operator<br><input type="checkbox"/>                |  | Contractor/Operator<br><input type="checkbox"/> |
| Owner Type<br>(check one) | 1. Individual<br><input type="checkbox"/> | 2. Corporation<br><input type="checkbox"/> | 3. Government<br>Agency<br><input type="checkbox"/> | 4. Partnership<br><input type="checkbox"/> | 5. Other<br><input type="checkbox"/>            |

**V. PROPERTY OWNER** *(For project specific discharges where property owner is different from applicant. If additional property owners are involved, provide information in a supplemental letter.)*

|                           |   |  |   |  |                                      |
|---------------------------|---|--|---|--|--------------------------------------|
| Name                      |   |  |   |  |                                      |
| Mailing Address           |   |  |   |  |                                      |
| City                      | State                                     | Zip  | License Number                                      |  |                                      |
| Contact Person            |   |  |   |  |                                      |
| Owner Type<br>(check one) | 1. Individual<br><input type="checkbox"/> | 2. Corporation<br><input type="checkbox"/> | 3. Government<br>Agency<br><input type="checkbox"/> | 4. Partnership<br><input type="checkbox"/> | 5. Other<br><input type="checkbox"/> |

**VI. ADDRESS WHERE LEGAL NOTICE MAY BE SERVED**

|                 |       |                          |       |
|-----------------|-------|--------------------------|-------|
| Name            |       |                          |       |
| Mailing Address |       |                          |       |
| City            | State | Zip                      | Phone |
| Contact Person  |       | Email for Contact Person |       |

**VII. BILLING ADDRESS** *(where annual fee invoices should be sent)*

|                 |       |                          |       |
|-----------------|-------|--------------------------|-------|
| Name            |       |                          |       |
| Mailing Address |       |                          |       |
| City            | State | Zip                      | Phone |
| Contact Person  |       | Email for Contact Person |       |

**VIII. PROJECT DESCRIPTION**

|  |  |  |
|--|--|--|
| <input type="checkbox"/> Provide a full description on official letterhead of the proposed project, BMP or Control Strategy Plan, and discharge(s). Include the proposed maximum daily discharge volume in gallons per day (gpd), the approximate start-up date for the project and discharge, and the projected discharge duration.<br><div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div>Start Date _____</div> <div>Estimated Stop Date _____</div> <div>Discharge or Design Flow Rate (in gpd) _____</div> </div> <div style="margin-top: 5px;">Is the discharge continuous or intermittent? _____</div> <div style="margin-top: 5px;">Are additives in the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No</div> <div style="margin-top: 5px;">If yes, please specify the additive and/or sample results: _____</div> |  |  |
| <input type="checkbox"/> Agencies having multiple discharges shall include in the project description estimates of the number, frequency, rate, and types of discharges expected to the receiving water(s). Locations shall be provided for continuous discharges greater than 24 hours.   |  |  |
| <input type="checkbox"/> Dischargers of wastewater from drainage of ornamental pools, golf course lakes, and impounded water, provide verification that pesticides, insecticides, biocides, and/or other chemicals that may have been applied to the wastewater are not present in the discharge (e.g., results of wastewater analyses or certification that chemicals have not been applied to the wastewater).   |  |  |

## IX. DISCHARGE LOCATION AND RECEIVING WATER INFORMATION

|                          |  |
|--------------------------|--|
| 1.                       | Name of Receiving Water(s):<br>_____   |
| 2.                       | Receiving Water is tributary to (name major <i>downstream</i> water body(ies)):<br>_____   |
| 3.                       | Receiving Water Designation <input type="checkbox"/> Municipal and Domestic Supply <input type="checkbox"/> Water Contact Recreation<br>(check all that apply) <input type="checkbox"/> Non-Contact Water Recreation   |
| 4.                       | Discharge Point<br>Latitude (Deg, Min, Sec) _____ Longitude (Deg, Min, Sec) _____<br>Dischargers or Agencies having multiple discharges shall provide the latitude and longitude of known discharge locations in a supplemental letter for continuous discharges exceeding 24 hours.   |
| 5.                       | Identify and describe the proposed effluent (EFF-001), upstream receiving water (RSW-001), and downstream receiving water monitoring locations. If upstream and/or downstream receiving water monitoring cannot be conducted either because receiving water is not present or because the discharge is to a storm drain channel and does not contribute to a downstream receiving waterbody, indicate in the space below or in a supplemental letter.<br>_____<br>_____<br>_____ |
| <input type="checkbox"/> | Attach a map of at least 1:24000 (1"=2000') showing the discharge site (e.g., USGS 7.5' topographic map). The map should also show the treatment system, discharge point, and surface waters. Agencies having more than one discharge location may submit a service area map or regional map.  |
| <input type="checkbox"/> | Provide a copy of the letter of acceptance or permit from the agency (e.g., municipality, water district, or other special district) responsible for the discharge location to allow the discharge into their drainage system, if applicable.  |



## X. SAMPLING REQUIREMENTS

### **Analyses Required of All Dischargers**

- ☐ Provide the results of analysis of the proposed effluent for the priority pollutants listed in Table B-2 and Table B-3 of Attachment B. *(Required of all Dischargers. Dischargers of wastewater from water system-related activities may pursue any or all of the following three options to satisfy this requirement.)*
  - ☐ Complete section XIV of this NOI if applying for a categorical exception for meeting the priority pollutant criteria / objectives as authorized under section 5.3 of the SIP<sup>1</sup>. Dischargers granted a categorical exception are not required to perform wastewater sampling for the priority pollutants contained in Tables B-2 and B-3 of Attachment B. *(Optional for Dischargers of wastewater from water system-related activities.)*
  - ☐ Provide the summary results of monitoring for applicable parameters reported in the annual Consumer Confidence Report as required by Title 22, Division 4, Chapter 15, Article 20 of the California Code of Regulations to satisfy the sampling requirements contained in Tables B-2 and/or B-3 for applicable parameters. *(Optional for Dischargers of wastewater from water system-related activities.)*
  - ☐ Provide a copy of the waiver(s) for monitoring requirements granted by the California Department of Public Health, Division of Drinking Water and Environmental Management for the monitoring requirements contained in Title 22, Division 4, Chapter 15 of the California Code of Regulations. Dischargers granted a waiver may be exempt from the sampling requirements for the applicable parameter(s) contained in Tables B-2 and/or B-3 of Attachment B. *(Optional for Dischargers of wastewater from water system-related activities.)*
- ☐ Provide the results of analysis of the proposed effluent and the receiving water for conventional and non-conventional pollutants as specified in Table B-4 of Attachment B. *(Required of all Dischargers.)*

### **Analyses Required for Discharges from Water System-Related Activities and Other Low Threat Discharge Activities**

- ☐ Provide the results of analysis of the proposed effluent for total chlorine residual or a dechlorinating agent as specified in Table B-5 of Attachment B. *(Required only of Dischargers of wastewater from water system-related activities and other low threat discharge activities containing chlorine.)*

### **Analyses Required for Discharges of Hydrostatic Test Water**

- ☐ Provide the results of analysis of the proposed effluent as specified in Table B-6 of Attachment B.

### **Analyses Required for Discharges to Specific Waterbodies or Waterbodies with Specific Designated Uses**

- ☐ Provide the results of analysis of the proposed effluent for pollutants causing impairment under the current Clean Water Act section 303(d) list. The list of impaired surface water may be found at [http://www.swrcb.ca.gov/water\\_issues/programs/tmdl/303d\\_lists2006\\_epa.shtml](http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml). *(Required of all Dischargers proposing to discharge to an impaired surface water)*
- ☐ Provide the results of analysis of the proposed effluent for E. coli as specified in Table B-8 of Attachment B. *(Required only of Dischargers to waterbodies designated as REC-I and segments of the Colorado River designated as REC-I)*
- ☐ Provide the results of analysis of the proposed effluent for E. coli as specified in Table B-9 of Attachment B. *(Required only of Dischargers to waterbodies designated as REC-II and segments of the Colorado River designated as REC-II)*
- ☐ Provide the results of analysis of the proposed effluent for E. coli, enterococci, fecal coliform organisms, and TSS as specified in Table B-10 of Attachment B. *(Required only of Dischargers to the New River)*
- ☐ Provide the analytical data from the laboratory or reports provided to regulatory agencies.

### **Were the screening levels for Tables B-4 through B-10 in Attachment B exceeded?**

☐ Yes ☐ No → If No, skip to section XII below.

If "yes," identify the parameters for which screening levels were exceeded:

<sup>1</sup> Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP).

## XI. ABILITY TO COMPLY WITH EFFLUENT LIMITATIONS

- ☐ How will you comply with the effluent limitations in this General Board Order for the pollutants that exceeded the applicable screening levels in Tables B-4 through B-10 Attachment B? *[Please describe the best management practices (BMP) and/or control strategies you will employ to ensure compliance with proposed discharge(s)]*

## XII. BMP OR CONTROL STRATEGY PLAN

- ☐ Do you have a BMP or Control Strategy Plan in place for your proposed discharge(s)?  
☐ Yes ☐ No
- ☐ If yes, is the BMP Plan consistent with the general guidance contained in the USEPA *Guidance Manual for Developing Best Management Practices* (BMPs) (EPA 833-B-93-004)?  
☐ Yes ☐ No
- Check applicable item below.*
- ☐ If you exceeded a screening level in Attachment B for any parameter, you must submit a BMP or Control Strategy Plan with your completed NOI. The BMP Plan must be consistent with the general guidance contained in the USEPA *Guidance Manual for Developing Best Management Practices* (BMPs) (EPA 833-B-93-004).  
☐ **Check here if a BMP or Control Strategy Plan is included in the NOI package.**
- ☐ If you did not exceed a screening level in Attachment B for any parameter, you must develop and implement a BMP Plan and have it available for inspection by the Regional Water Board. The BMP Plan must be consistent with the general guidance contained in the USEPA *Guidance Manual for Developing Best Management Practices* (BMPs) (EPA 833-B-93-004).

## XIII. CATEGORICAL EXCEPTION FOR PRIORITY POLLUTANT CRITERIA / OBJECTIVES

- Is the discharge necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code? ☐ Yes ☐ No → If No skip to section XIV below.
- If "yes," the Discharger shall submit the following for the approval of the Executive Officer:
- ☐ A detailed description of the proposed action, including the proposed method of completing the action;
- ☐ A time schedule;
- ☐ A discharge and receiving water quality monitoring plan (before project initiation, during the project, and after project completion, with the appropriate quality control procedures); include summary results of monitoring for applicable parameters reported in the annual Consumer Confidence Report as required by Title 22, Division 4, Chapter 15, Article 20 of the California Code of Regulations
- ☐ California Environmental Quality Act (CEQA) documentation;
- ☐ Contingency plans;
- ☐ Identification of alternate water supply (if needed); and
- ☐ Residual waste disposal plans.

#### XIV. EVALUATION OF RECLAMATION OPTIONS

To obtain coverage under this General Board Order, the Discharger is required to evaluate reclamation options.

- ☐ Provide proof that discharge to the local municipal wastewater treatment plant is not viable or explain why it is infeasible to connect to the wastewater treatment plant. The Discharger may submit any denial or restrictive flow letter from the wastewater treatment plant as proof that this is not a viable option.
- ☐ Provide an explanation why land disposal is not a viable option.
- ☐ Provide an explanation why underground injection is not a viable option.

#### XV. FEES

- ☐ Provide the current State Water Board adopted permit fee, plus applicable surcharge(s). The current fees for Category 3 discharges (i.e., those discharges that require minimal or no treatment systems to meet limits and pose no significant threat to water quality) is \$1,200. The applicable surcharge is 21%. Consult <http://www.waterboards.ca.gov/resources/fees> to verify current fees.

#### XVI. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The Regional Water Board will be immediately notified of any violation, or threatened violation, of this General Board Permit.

Signature of Contractor/Operator/Responsible Party

Signature of Property Owner

Print or Type Name

Print or Type Name

Title

Date

Title

Date

#### XVII. OTHER

Attach additional sheets to explain any responses which need clarification. List attachments with titles and dates below:

A representative of the Regional Water Board will notify you within 30 days of receipt of your Notice of Intent. The notice will state if your discharge meets the criteria for this General Board Order, whether the Notice of Intent is complete, or if additional information must be submitted to complete your application, pursuant to division 7, section 13260 of the California Water Code.

The completion date of your application is normally the date when all required information, including the correct fee, is received by the Regional Water Board.

#### FOR REGIONAL WATER BOARD OFFICE USE ONLY

Date NOI Received:

Letter to Discharger Sent:

Fee Amount Received:

Check #:

## **ATTACHMENT D – STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this General Board Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this General Board Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Board Order. (40 C.F.R. § 122.41(c).)

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this General Board Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this General Board Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this General Board Order. (40 C.F.R. § 122.41(e).)

#### **E. Property Rights**

1. This General Board Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this General Board Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

## **F. Inspection and Entry**

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this General Board Order (40 C.F.R. § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Board Order (40 C.F.R. § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this General Board Order (40 C.F.R. § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring General Board Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

## **G. Bypass**

### **1. Definitions**

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

## 5. Notice

- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)
- b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was

caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
  - b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This General Board Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any General Board Order condition. (40 C.F.R. § 122.41(f).)

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this General Board Order after the expiration date of this General Board Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

### **C. Transfers**

This General Board Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the General Board Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

### **III. STANDARD PROVISIONS – MONITORING**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B.** Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this General Board Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

### **IV. STANDARD PROVISIONS – RECORDS**

- A.** Except for records of monitoring information required by this General Board Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this General Board Order, and records of all data used to complete the application for this General Board Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

**B. Records of monitoring information shall include:**

- 1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
- 2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
- 3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
- 4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
- 5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
- 6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

**C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):**

- 1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
- 2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)



## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this General Board Order or to determine compliance with this General Board Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this General Board Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)
3. All reports required by this General Board Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of

- equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
- c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this General Board Order. (40 C.F.R. § 122.22(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this General Board Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this General Board Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

#### **D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this General Board Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

#### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
  - a. Any unanticipated bypass that exceeds any effluent limitation in this General Board Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
  - b. Any upset that exceeds any effluent limitation in this General Board Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

#### **F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing

permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. § 122.41(l)(1)(iii).)

#### **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Board Order requirements. (40 C.F.R. § 122.41(l)(2).)

#### **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

#### **I. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

### **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387

### **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

#### **A. Non-Municipal Facilities**

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

- 1.** That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this General Board Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):
  - a.** 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));
  - b.** 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

- c.** Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or
  - d.** The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)
- 2.** That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this General Board Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(2)):
  - a.** 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));
  - b.** 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));
  - c.** Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or
  - d.** The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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## **ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)**

The *Code of Federal Regulations* (CFR), section 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code (CWC) sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### **I. GENERAL MONITORING PROVISIONS**

- A.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be collected at the monitoring locations specified below and in the Notice of Authorization (NOA) granted by the Regional Water Board's Executive Officer, and, unless otherwise specified, at the most representative sampling point available before the monitored flow joins the receiving water. Monitoring locations shall not be changed without notification to and the approval of this Regional Water Board.
- B.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 10$  percent from true discharge rates throughout the range of expected discharge volumes. Guidance in the selection, installation, calibration, and operation of acceptable flow measurement devices may be obtained from the following references:
  - 1. "A Guide to Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)
  - 2. "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.)
  - 3. "Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 197, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST.)

4. "NPDES Compliance Sampling Manual," U.S. Environmental Protection Agency (USEPA), Office of Water Enforcement, Publication MDC-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)
- C. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices.
- D. All analyses shall be conducted at a laboratory certified for such analyses by the State Department of Public Health. Laboratories analyzing monitoring samples shall be certified by the Department of Public Health, in accordance with the provision of CWC section 13176, and must include quality assurance/quality control data with their reports.
- E. Chemical and bacteriological analyses shall be conducted at a laboratory certified for such analyses by the State Department of Public Health (DPH; formerly the Department of Health Services).
- F. All analyses shall be performed in a laboratory certified to perform such analyses by the California DPH, with the exception of total residual chlorine, pH, electrical conductivity and temperature. Laboratories that perform sample analyses shall be identified in all monitoring reports. A quality control and assurance manual containing steps for sampling and analysis for total residual chlorine, pH, electrical conductivity, and temperature shall be maintained and available for inspection by Regional Board staff. A Quality Assurance-Quality Control Program must conform to USEPA guidelines and instituted by the laboratory for these analyses.
- G. The collection, preservation, and holding times of all samples shall be in accordance with the test procedures under 40 CFR Part 136 (revised as of May 14, 1999) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (USEPA), unless otherwise specified in this MRP. In addition, the Regional Water Board and/or USEPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR Part 136.
- H. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- I. If the facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Regional Water Board indicating that there has been no activity during the required reporting period.
- J. Except for data determined to be confidential under the Clean Water Act (CWA) section 308, all reports prepared in accordance with the terms of this General Board Order shall be available for public inspection at the offices of the Regional Water Board and the Regional Administrator of USEPA. As required by the CWA, effluent data shall not be



considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in CWA section 309 and CWC section 13387.

## II. MONITORING LOCATIONS

Each Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this General Board Order.

**Table E-1. Monitoring Station Locations**

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description  |
|----------------------|--------------------------|--|
| 001 <sup>1</sup>     | EFF-001                  | A location where a representative sample of the effluent can be collected.   |
| --                   | RSW-001                  | Immediately upstream of the discharge point to obtain a representative sample of the background conditions of the upstream flow. |
| --                   | RSW-002                  | Downstream of the discharge point to obtain a representative sample of the combined flow.  |

<sup>1</sup> Dischargers with more than one discharge point must comply with the effluent limitations and monitoring requirements of this General Board Order at each discharge point as identified in the Notice of Applicability (NOA).

## III. INFLUENT MONITORING REQUIREMENTS – Not Applicable

## IV. EFFLUENT MONITORING REQUIREMENTS

### A. Monitoring Location EFF-001

1. All Dischargers shall monitor their low threat wastewater at EFF-001 according to the requirements in Table E-2. Dischargers with more than one discharge point must comply with the effluent limitations and monitoring requirements in this General Board Order at each discharge point as specified in the NOA.

**Table E-2. Effluent Monitoring for All Discharges**

| Parameter   | Units <sup>1</sup> | Sample Type | Minimum Sampling Frequency <sup>2</sup> | Required Analytical Test Method |
|---|--------------------|-------------|---|---------------------------------|
| Flow <sup>10</sup>  | gpd                | Estimate    | 1X/Day                                  | 3                               |
| TSS <sup>4</sup>  | mg/L               | Grab        | 1X/Discharge                            | 3                               |
| Oil and Grease <sup>4</sup>                                 | mg/L               | Grab        | 1X/Discharge                            | 3                               |
| pH <sup>4</sup>   | standard units     | Grab        | 1X/Discharge                            | 3, 6                            |
| Total Dissolved Solids <sup>4</sup>                         | mg/L               | Grab        | 1X/Discharge                            | 3, 7                            |
| Total Petroleum Hydrocarbons <sup>5</sup>                   | mg/L               | Grab        | 1X/Discharge                            | 3                               |
| Hardness, Total (as CaCO <sub>3</sub> ) <sup>9</sup>        | mg/L               | Grab        | 1X/Year                                 | 3                               |
| Priority Pollutant listed in Table B-2 and B-3 <sup>9</sup> | µg/L               | Grab        | 1X/Year                                 | 3, 8                            |

<sup>1</sup> gpd = gallons per day

µg/L = micrograms per liter

<sup>2</sup> If the discharge is intermittent rather than continuous, then on the first day of each intermittent discharge, the Discharger shall monitor and record data for all of the constituents in Table E-2 above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. The Discharger shall not be required to monitor and record data more often than twice the frequencies listed in the table.

<sup>3</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

<sup>4</sup> Not applicable to discharges from established water supply systems where parameter is not expected to exceed screening level.

<sup>5</sup> Applies only to dewatering/discharge operations near suspected petroleum hydrocarbon contaminated sites or when diesel or gasoline powered generator is used in dewatering/discharge operation.

<sup>6</sup> A handheld field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this MRP shall be maintained by the Discharger.

<sup>7</sup> Electrical conductivity data (µmhos/cm = micromhos per centimeter) can be used for total dissolved solids if the discharger can produce a correlation between the two parameters.

<sup>8</sup> If the priority pollutants were monitored at the onset during the application process, the discharger may submit the analytical results in lieu of the first sampling results.

<sup>9</sup> Dischargers approved for a categorical exception for meeting the priority pollutant criteria/objectives as authorized by section 5.3 of the SIP are not required to perform wastewater sampling for priority pollutants and hardness.

<sup>10</sup> Not applicable to untreated discharges from groundwater wells used as drinking water sources.

2. Discharges of wastewater from water system-related activities shall monitor their low threat wastewater at EFF-001 according to the requirements in Table E-2 through E3. Dischargers with more than one discharge point must comply with the effluent limitations and monitoring requirements in this General Board Order at each discharge point as specified in the NOA.

**Table E-3. Effluent Monitoring for Water System-Related Activities Discharges**

| Parameter                             | Units <sup>1</sup> | Sample Type | Minimum Sampling Frequency <sup>2</sup> | Required Analytical Test Method |
|---------------------------------------|--------------------|-------------|---|---------------------------------|
| Chlorine, Total Residual <sup>6</sup> | mg/L               | Grab        | 1X/Discharge                            | 3, 4, 5                         |

<sup>1</sup> mg/L = milligrams per liter

<sup>2</sup> If the discharge is intermittent rather than continuous, then on the first day of each intermittent discharge, the Discharger shall monitor and record data for all of the constituents in Table E-3 above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. The Discharger shall not be required to monitor and record data more often than twice the frequencies listed in the table.

<sup>3</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

<sup>4</sup> A handheld field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this MRP shall be maintained by the Discharger.

<sup>5</sup> Total chlorine residual shall be monitored with a method sensitive to and accurate at a reporting level of 0.08 mg/L, or any more stringent reporting level included in a final statewide policy or standard for total residual chlorine.

<sup>6</sup> Not applicable to discharges from groundwater wells before chlorine is added to the water delivered to the potable water system.

- Discharges of wastewater from hydrostatic test water-related activities shall monitor their low threat wastewater at EFF-001 according to the requirements in Table E-2 through E4. Dischargers with more than one discharge point must comply with the effluent limitations and monitoring requirements in this General Board Order at each discharge point as specified in the NOA.

**Table E-4. Effluent Monitoring for Hydrostatic Test Water-Related Activities Discharges**

| Parameter   | Units <sup>1</sup> | Sample Type | Minimum Sampling Frequency <sup>2</sup> | Required Analytical Test Method |
|---|--------------------|-------------|---|---------------------------------|
| Total Suspended Solids                                | mg/L               | Grab        | 1X/Discharge                            | 3                               |
| BOD <sub>5</sub> @ 20 °C or CBOD <sub>5</sub> @ 20 °C | mg/L               | Grab        | 1X/Discharge                            | 3                               |
| Oil and Grease  | mg/L               | Grab        | 1X/Discharge                            | 3                               |
| Turbidity   | NTU                | Grab        | 1X/Discharge                            | 3, 4                            |
| Settleable Solids                                     | ml/L               | Grab        | 1X/Discharge                            | 3                               |
| Chlorine, Total Residual                              | mg/L               | Grab        | 1X/Discharge                            | 3, 4, 5                         |

| Parameter | Units <sup>1</sup> | Sample Type | Minimum Sampling Frequency <sup>2</sup> | Required Analytical Test Method |
|-----------|--------------------|-------------|---|---------------------------------|
|-----------|--------------------|-------------|---|---------------------------------|

<sup>1</sup> mg/L = milligrams per liter

ml/L = milliliter per liter

NTU = Nephelometric Turbidity Units

<sup>2</sup> If the discharge is intermittent rather than continuous, then on the first day of each intermittent discharge, the Discharger shall monitor and record data for all of the constituents in Table E-4 above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. The Discharger shall not be required to monitor and record data more often than twice the frequencies listed in the table.

<sup>3</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

<sup>4</sup> A handheld field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this MRP shall be maintained by the Discharger.

<sup>5</sup> Total chlorine residual shall be monitored with a method sensitive to and accurate at a reporting level of 0.08 mg/L, or any more stringent reporting level included in a final statewide policy or standard for total residual chlorine.

4. Discharges of wastewater to Specific Waterbodies shall monitor their low threat wastewater at EFF-001 according to the requirements provided in subsection IV.A.1 through 3 and Table E-5. Dischargers with more than one discharge point must comply with the effluent limitations and monitoring requirements in this General Board Order at each discharge point as specified in the NOA

**Table E-5. Effluent Monitoring for Discharges to Specific Waterbodies<sup>1</sup>**

| Parameter                                     | Units <sup>2</sup> | Sample Type | Minimum Sampling Frequency <sup>3</sup> | Required Analytical Test Method |
|---|--------------------|-------------|---|---------------------------------|
| <i>Eschericia coli</i> (E. coli) <sup>6</sup> | MPN/100 mL         | Grab        | 1X/Discharge <sup>4</sup>               | 5                               |
| Enterococci <sup>6</sup>                      | MPN/100 mL         | Grab        | 1X/Discharge <sup>4</sup>               | 5                               |
| Fecal Coliform Organisms <sup>6</sup>         | MPN/100 mL         | Grab        | 1X/Discharge <sup>4</sup>               | 5                               |

| Parameter | Units <sup>2</sup> | Sample Type | Minimum Sampling Frequency <sup>3</sup> | Required Analytical Test Method |
|-----------|--------------------|-------------|---|---------------------------------|
|-----------|--------------------|-------------|---|---------------------------------|

<sup>1</sup> Dischargers proposing to discharge low threat wastewater under this General Board Order to waterbodies designated as REC-I or REC-II, segments of the Colorado River designated as REC-I or REC-II, or the New River shall analyze a representative sample of the effluent for the parameters as indicated in Tables B-8 through B-10.

<sup>2</sup> MPN/100 mL = most probable number per 100 milliliters

<sup>3</sup> If the discharge is intermittent rather than continuous, then on the first day of each intermittent discharge, the Discharger shall monitor and record data for all of the constituents in Table E-5 above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. The Discharger shall not be required to monitor and record data more often than twice the frequencies listed in the table.

<sup>4</sup> If discharge period is over 30 calendar days a minimum of 5 samples are required within 30 days. At least one sample per week.

<sup>5</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

<sup>6</sup> Not applicable to discharges from established water supply systems where parameter is not expected to exceed screening level.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS – Not Applicable

## VI. LAND DISCHARGE MONITORING REQUIREMENTS – Not Applicable

## VII. RECLAMATION MONITORING REQUIREMENTS – Not Applicable

## VIII. RECEIVING WATER MONITORING REQUIREMENTS

### A. Monitoring Location RSW-001 (Upstream Receiving Water)

The Discharger shall monitor the receiving water at monitoring location RSW-001, as in Table E-6 below. In the event that no receiving water is present at RSW-001, receiving water monitoring at RSW-001 is not required.

**Table E-6. Upstream Receiving Water Monitoring Requirements**

| Parameter  | Units <sup>1</sup> | Sample Type | Minimum Sampling Frequency <sup>2</sup> | Required Analytical Test Method |
|--|--------------------|-------------|---|---------------------------------|
| Dissolved Oxygen <sup>6</sup>                        | mg/L               | Grab        | 1X/Discharge                            | <sup>3</sup>                    |
| Total Dissolved Solids <sup>6</sup>                  | mg/L               | Grab        | 1X/Discharge                            | <sup>3, 4</sup>                 |
| pH <sup>6</sup>                                      | standard units     | Grab        | 1X/Discharge                            | <sup>3</sup>                    |
| Hardness, Total (as CaCO <sub>3</sub> ) <sup>5</sup> | mg/L               | Grab        | 1X/Year                                 | <sup>3</sup>                    |
| Temperature <sup>6</sup>                             | °F                 | Grab        | 1X/Discharge                            | <sup>3</sup>                    |

| Parameter | Units <sup>1</sup> | Sample Type | Minimum Sampling Frequency <sup>2</sup> | Required Analytical Test Method |
|-----------|--------------------|-------------|---|---------------------------------|
|-----------|--------------------|-------------|---|---------------------------------|

<sup>1</sup> mg/L = milligrams per liter

°F = Degrees Fahrenheit

<sup>2</sup> If the discharge is intermittent rather than continuous, then on the first day of each intermittent discharge, the Discharger shall monitor and record data for all of the constituents in Table E-6 above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. The Discharger shall not be required to monitor and record data more often than twice the frequencies listed in the table.

<sup>3</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board

<sup>4</sup> Electrical conductivity data (µmhos/cm = micromhos per centimeter) can be used for total dissolved solids if the discharger can produce a correlation between the two parameters.

<sup>5</sup> Dischargers approved for a categorical exception for meeting the priority pollutant criteria/objectives as authorized by section 5.3 of the SIP are not required to perform wastewater sampling for hardness.

<sup>6</sup> Not applicable to discharges from established water supply systems where parameter is not expected to exceed screening level.

## B. Monitoring Location RSW-002 (Downstream Receiving Water)

The Discharger shall monitor the receiving water at monitoring location RSW-002, as in Table E-7 below. In the event that no receiving water is present at RSW-002, receiving water monitoring at RSW-002 is not required. Similarly, if the discharge is to a storm drain system, monitoring is not required unless the discharge flow is contributing to the downstream receiving waterbody.

**Table E-7. Downstream Receiving Water Monitoring Requirements**

| Parameter                           | Units <sup>1</sup> | Sample Type | Minimum Sampling Frequency <sup>2</sup> | Required Analytical Test Method |
|-------------------------------------|--------------------|-------------|---|---------------------------------|
| Dissolved Oxygen <sup>5</sup>       | mg/L               | Grab        | 1X/Discharge                            | 3                               |
| Total Dissolved Solids <sup>5</sup> | mg/L               | Grab        | 1X/Discharge                            | 3, 4                            |
| pH <sup>5</sup>                     | standard units     | Grab        | 1X/Discharge                            | 3                               |
| Temperature <sup>5</sup>            | °F                 | Grab        | 1X/Discharge                            | 3                               |

<sup>1</sup> mg/L = milligrams per liter

°F = Degrees Fahrenheit

<sup>2</sup> If the discharge is intermittent rather than continuous, then on the first day of each intermittent discharge, the Discharger shall monitor and record data for all of the constituents in Table E-7 above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. The Discharger shall not be required to monitor and record data more often than twice the frequencies listed in the table.

<sup>3</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board

<sup>4</sup> Electrical conductivity data (µmhos/cm = micromhos per centimeter) can be used for total dissolved solids if the discharger can produce a correlation between the two parameters

<sup>5</sup> Not applicable to discharges from established water supply systems where parameter is not expected to exceed screening level.

## IX. OTHER MONITORING REQUIREMENTS – Not Applicable

## X. REPORTING REQUIREMENTS

### A. General Monitoring and Reporting Requirements

1. New Dischargers who have received an NOA for coverage under this General Board Order shall inform the Regional Water Board 24 hours before the start of the initial discharge.
2. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
3. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

### B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) program Web site ([http://www.waterboards.ca.gov/water\\_issues/programs/ciwqs/](http://www.waterboards.ca.gov/water_issues/programs/ciwqs/)). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. Authorized Dischargers shall report in the SMR the results for all monitoring specified in this MRP under sections II through VIII. The Discharger shall submit monthly, quarterly, semiannual, annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this General Board Order. If the Discharger monitors any pollutant more frequently than required by this General Board Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for project specific required monitoring shall be completed according to the following schedule:

**Table E-8. Monitoring Periods and Reporting Schedule**

| Sampling Frequency  | Monitoring Period Begins On... | Monitoring Period | SMR Due Date                                  |
|---------------------|--------------------------------|-------------------|---|
| 1 / Discharge Event | NOA effective date             | All               | May 1<br>August 1<br>November 1<br>February 1 |

| Sampling Frequency | Monitoring Period Begins On...  | Monitoring Period  | SMR Due Date                                  |
|--------------------|---|--|---|
| 1 / Day            | NOA effective date  | Midnight through 11:59 pm or any 24-hour period that reasonably represents a calendar day for the purposes of sampling | May 1<br>August 1<br>November 1<br>February 1 |
| 2 / Week           | Sunday following NOA effective date <i>or</i> on NOA effective date if a Sunday   | Sunday through Saturday  | May 1<br>August 1<br>November 1<br>February 1 |
| 1 / Month          | First day of calendar month following NOA effective date <i>or</i> on NOA effective date if that date is the first day of the month | First day of calendar month through last day of calendar month   | May 1<br>August 1<br>November 1<br>February 1 |
| 2 / Month          | First day of calendar month following NOA effective date <i>or</i> on NOA effective date if that date is the first day of the month | First day of calendar month through last day of calendar month   | May 1<br>August 1<br>November 1<br>February 1 |
| 1 / Quarter        | Closest of January 1, April 1, July 1, or October 1 following ( <i>or on</i> ) NOA effective date                                   | January 1 through March 31<br>April 1 through June 30<br>July 1 through September 30<br>October 1 through December 31  | May 1<br>August 1<br>November 1<br>February 1 |
| 1 / Year           | January 1 following ( <i>or on</i> ) NOA effective date   | January 1 through December 31  | February 1                                    |
| 2 / Year           | Closest of January 1 or July 1 following ( <i>or on</i> ) NOA effective date  | January 1 through June 30<br>July 1 through December 31  | February 1<br>August 1                        |

4. Monitoring periods and reporting for agencies with categorical exception shall be annually.

### C. Reporting Protocols

Authorized Dischargers shall report with each sample result the applicable reported ML and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

1. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).



2. Sample results less than the reporting level (RL), but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

3. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
4. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
5. **Multiple Sample Data.** If the permit contains an average monthly effluent limitation (AMEL) for a priority pollutant and more than one sample result is available for the pollutant, the Discharger shall report the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall report the median in place of the arithmetic mean in accordance with the following procedure:
  - a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
  - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
6. Authorized Dischargers shall submit SMRs in accordance with the following requirements:
  - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for

entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements (WDRs); discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- c. SMRs shall be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below in Table E-9:

**Table E-9. Self-Monitoring Report – Mailing Address**

| <b>Standard Mail/FedEx/UPS/Other Private Carriers</b>  |
|--|
| California Regional Water Quality Control Board<br>Colorado River Basin Region<br>73-720 Fred Waring, Suite 100<br>Palm Desert, CA 92260 |

#### **D. Discharge Monitoring Reports (DMRs) – Not Applicable**

#### **E. Other Reports**

- 1. **Annual Report.** By February 1 of each year, the Discharger shall submit a written report to the Executive Officer containing the following:
  - a. The names and telephone numbers of persons to contact regarding the facility/project for emergency and routine situations.
  - b. A statement certifying whether the current Best Management Practices (BMP) or Control Strategy Plan, reflect the Discharger's operations as currently constructed and operated, and the date when the BMP or Control Strategy Plan was last revised and last reviewed for adequacy.
  - c. Dischargers shall provide a summary report that includes the number, frequency, rate, and types of discharges to the receiving water(s).
  - d. For those dischargers with a project specific NOA, a statement certifying that the discharges conducted in the previous year were in compliance with this General Board Order.

- e. For those dischargers granted a categorical exception under 5.3 of the SIP, a statement certifying that the discharges conducted in the previous year were necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code and were in compliance with this General Board Order.

## ATTACHMENT F – FACT SHEET

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## ATTACHMENT F – FACT SHEET

As described in section II of this General Board Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this General Board Order.

This General Board Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this General Board Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this General Board Order not specifically identified as “not applicable” are fully applicable to this Discharger.

### I. PERMIT INFORMATION

For the purposes of this General Board Order, references to the terms, Discharger, Permittee or Enrollee, in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to the term, Discharger, herein.

#### A. Background

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act or CWA) was amended to provide that the discharge of pollutants to waters of the United States from any point source is effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

On September 22, 1989, the United States Environmental Protection Agency (USEPA) granted the State of California, through the State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (Regional Water Boards), the authority to issue general NPDES permits pursuant to Title 40 of the *Code of Federal Regulations* (CFR) Parts 122 and 123.

Section 122.28 (40 CFR 122.28) provides for issuance of general permits to regulate a category of point sources if the sources involve the same or substantially similar types of operations, discharge the same type of waste, require the same type of effluent limitations or operating conditions, require similar monitoring, and would more appropriately be regulated under a *general* rather than an *individual* permit.

Individuals, public agencies, private business, and other legal entities occasionally need to discharge treated or untreated wastewaters directly into surface waters of the United States that pose an insignificant or minimal (i.e., low threat) to water quality. The activities that generate these low threat wastewaters are similar in that they generate wastewater flows that are similar in volume and quality. Therefore, the Regional Water Board considers it appropriate to issue General Waste Discharge Requirements (WDRs) and a General NPDES Permit for Dischargers of such flows.

## B. General Criteria

1. Individuals or entities proposing to discharge treated or untreated wastewaters containing little or no pollutants to waters of the United States must apply for coverage under this General Board Order **except** those whose discharges that are covered under other Regional Board or Statewide General Permit or individual permit.

This General Board Order is designed to cover low threat wastewater discharges to surface waters of the United States in the following activity categories:

- a. **Water System-Related Activities**<sup>1</sup>. This category includes discharges from water treatment (including water recycling) facilities, industries, and other entities that maintain and operate potable or non-potable water systems.

***Examples:***

- Maintenance and repairs to uncontaminated water supply wells, vessels, pipelines, tanks, reservoirs, and appurtenances;
- Hydrostatic testing (*see also item I.B.9 below*) of vessels, pipelines, tanks, reservoirs, and appurtenances (includes testing of newly constructed potable or non-potable pipelines, tanks, and vessels);
- Disinfection of wells, vessels, pipelines, tanks, reservoirs, and appurtenances;
- Discharges from water (including recycled water) systems resulting from designed or planned pressure releases, backwashing, flushing, or similar operational activities; and
- Fire hydrant testing or flushing.

- b. **Dewatering Activities**<sup>2</sup>. This category includes discharges from entities undertaking dewatering activities. *See also items I.B.3 through I.B.8 below.*

***Examples:***

- Treated or untreated groundwater from permanent or temporary dewatering operations to construct or protect pipelines and structures from groundwater infiltration or flotation; and
- Subterranean seepage dewatering, such as water extracted from crawl space pumps.

- c. **Groundwater Extraction Activities**<sup>3</sup>. This category includes discharges from entities that extract groundwater when investigating or cleaning up sites with soil and

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<sup>1</sup> This General Board Order is not intended to cover releases to surface water from water systems used to transport and deliver surface water for groundwater replenishment, irrigation or other municipal, industrial or agricultural uses.

<sup>2</sup> This General Board Order is not intended to cover releases to surface water from subsurface drainage systems installed to reclaim lands for beneficial uses.

<sup>3</sup> This General Board Order is not intended to cover releases to surface waters from untreated groundwater wells when operated as drinking water sources.

groundwater pollution or as a result of drilling, constructing, developing, and purging wells. *See also items I.B.3 through I.B.8 below.*

**Examples:**

- Groundwater pumped as an aid in the containment and/or cleanup of a containment plume or groundwater from cleanup sites (except for volatile organic constituents (VOC) contaminated groundwater);
- Groundwater generated from well drilling, construction, and development purging of wells;
- Groundwater extracted during aquifer tests;
- Equipment wash water;
- Geothermal well testing; and
- Groundwater infiltration (e.g., seepage, foundation or footage drainage, and seawater infiltration).

- d. **Other Low Threat Discharge Activities.** This category includes discharges from public and private entities that engage in other miscellaneous activities.

**Examples:**

- Pilot treatment discharges (less than 2 years in duration and where water is removed, treated, and discharged into the same water body at points having similar water characteristics);
- Evaporative condensate (e.g., discharges associated with atmospheric condensates including refrigeration, air conditioners, compressor condensate, and cooling towers);
- Equipment washing and spill wash water;
- Discharges from drainage of swimming or ornamental pools, golf course lakes, and impounded water bodies<sup>4</sup>;
- Discharges that have same types of waste. Although they pose a low threat to water quality, they still require WDRs since they are not covered by other Statewide or Regional Water Board-wide General Orders or an individual permit.

2. This General Board Order is intended to cover individuals or entities that discharge low threat wastewaters to surface waters of the United States. Dischargers of low threat wastewaters to surface waters that have been enrolled for coverage and whose discharge is allowed under an existing individual permit, or State Water Board-wide or Regional Water Board-wide General Permit contained in Table F-1 are not required to apply for coverage under this General Board Order and may continue to discharge pursuant to the existing permit.

**Table F-1. Related State Water or Regional Water Board-Wide General Permits**

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<sup>4</sup> For these types of water bodies discharges, a full characterization of the wastewater for presence of pesticides, priority pollutants, and or other chemicals that have been applied to the wastewater needs to be provided. There must be a demonstration that there are no pollutants present at levels of concern



| General Permit  | Water Quality Order No.<br>(NPDES General Permit No.) | Coverage   |
|---|---|--|
| WDRs for Discharges of Storm Water Associated with Construction Activity  | 99-08-DWQ (CAS000002)                                 | Statewide permit that applies to construction activities (clearing, grading, stockpiling, or excavation) that result in soil disturbances of at least 1 acres of total land.   |
| WDRs for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities                      | 97-03-DWQ (CAS000001)                                 | Statewide permit that applies to new or existing industrial storm water discharges and authorized non-storm water discharges.  |
| WDRs for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)  | 2003-0005-DWQ (CAS000004)                             | Statewide permit that applies to storm water discharges from small MS4s.   |
| WDRs for the State of California, Department of Transportation (Caltrans)   | 99-06-DWQ (CAS000003)                                 | Statewide permit that applies to municipal storm water activities by Caltrans, in areas that require a MS4 permit and in areas that do not require a permit. Also applies to all Caltrans construction activities that require a permit under federal regulations. |
| Treated Groundwater from Cleanup of Petroleum-related and Volatile Organic Compounds (VOCs) Regional Water Board General Permit | R7-2009-0400 (CAG917001)                              | Regional Water Board-wide permit that applies to discharges resulting from the cleanup of groundwater polluted by releases of petroleum related organic compounds and other VOCs associated with chemical releases.  |
| Statewide General NPDES Permit for Utility Vaults and Underground Structures  | 2006-0008-DWQ (CAG990002)                             | Statewide permit that applies to utility companies with short-term, intermittent discharges from utility vaults and underground structures.  |

3. The State Water Board adopted General Board Order No. 99-08-DWQ (NPDES Permit No. CAS000002) specifying WDRs for discharges of storm water associated with construction activities. Special Provision No. C.3 of General Board Order No. 99-08-DWQ also allows for the limited discharge of non-storm water discharges where such discharges do not cause or contribute to a violation of any water quality standard. Receiving water limitations in General Board Order No. 99-08-DWQ require compliance with all applicable water quality standards, including those contained in the *Water Quality Control Plan, Colorado River Basin* (hereinafter Basin Plan). Non-storm water discharges include, but are not limited to, (a) irrigation of vegetative erosion control measures; (b) pipe flushing and testing; (c) street cleaning; (d) dewatering; and (e) other miscellaneous discharges necessary for the completion of the construction project. The Regional Water Board finds that Statewide General Board Order No. 99-08-DWQ provides adequate water quality protection and compliance monitoring for the covered non-storm water discharges related to construction activities. Such discharges may continue to be regulated under General Board Order No. 99-08-DWQ.

4. The State Water Board adopted General Board Order No. 97-03-DWQ (NPDES Permit No. CAS000001) specifying WDRs for discharges of storm water associated with industrial activities, excluding construction activities, and some non-storm water discharges. Special Condition No. D.1 of General Board Order No. 97-03-DWQ authorizes such non-storm water discharges as (a) fire hydrant flushing; (b) potable water sources, including potable water related to the operation, maintenance, or testing of potable water systems; (c) drinking fountain water; (d) atmospheric condensates including refrigeration, air conditioners, and compressor condensate; (e) irrigation drainage; (f) landscape watering; (g) springs; (h) groundwater; (i) foundation or footage drainage; (j) sea water infiltration; and (k) discharges from fire fighting activities. General Board Order No. 97-03-DWQ further allows the Regional Water Board to establish additional monitoring and reporting requirements for these non-storm water discharges. The Regional Water Board finds that Statewide General Board Order No. 97-03-DWQ provides adequate water quality protection and compliance monitoring for the covered non-storm water discharges related to industrial activities. Such discharges may continue to be regulated under General Board Order No. 97-03-DWQ.
5. The State Water Board adopted General Board Order No. 2003-0005-DWQ (NPDES Permit No. CAS000004) specifying WDRs (Phase II storm water regulations) for discharges of storm water associated with small MS4s, and for limited discharges of non-storm water. Section D.2.c of General Board Order No. 2003-0005-DWQ authorizes such non-storm water discharges as (a) water line flushing; (b) landscape irrigation; (c) diverted stream flows; (d) rising ground waters; (e) uncontaminated ground water infiltration as defined at 40 CFR 35.2005, to separate storm sewers; (f) uncontaminated pumped ground water; (g) discharges from potable water sources; (h) foundation drains; (i) air conditioning condensation; (j) irrigation water; (k) springs; (l) water from crawl space pumps; (m) footing drains; (n) lawn watering; (o) individual residential car washing; (p) flows from riparian habitats and wetlands; and (q) dechlorinated swimming pool discharges. Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States. General Board Order No. 2003-0005-DWQ allows the Regional Water Board to establish additional monitoring and reporting requirements for the non-storm water discharges. The Regional Water Board finds that Statewide General Board Order No. 2003-0005-DWQ provides adequate water quality protection and compliance monitoring for the covered non-storm water discharges related to MS4 activities. Such discharges may continue to be regulated under General Board Order No. 2003-0005-DWQ.
6. In 1999, the State Water Board adopted General Board Order No. 99-06-DWQ (NPDES Permit No. CAS000003) to cover all municipal storm water activities by Caltrans in California and all Caltrans construction activities in the state that require a permit under federal regulations. The Regional Water Board finds that General Order No. 99-06-DWQ provides adequate water quality protection and compliance monitoring for

covered low threat discharges. Such covered discharges may continue to be regulated under General Board Order No. 99-06-DWQ.

7. The Regional Water Board adopted General Board Order No. R7-2009-0400 (NPDES Permit No. CAG917001) on September 17, 2009 to regulate discharges of treated groundwater resulting from the cleanup of groundwater polluted by VOCs into surface waters. The Regional Water Board finds that General Board Order No. R7-2009-0400 provides adequate water quality protection and compliance monitoring for the applicable low threat discharges and that such discharges may continue to be regulated under that General Board Order or a subsequent updated General Board Order.
8. On July 19, 2006, the State Water Board adopted General Board Order No. 2006-0008-DWQ (NPDES Permit No. CAG990002) to regulate discharges from utility vaults and underground structures to surface waters. Utility companies include, but are not limited to, suppliers of natural gas, electricity, and telephone services. Utility companies with short-term, intermittent discharges from utility vaults and underground structures to surface water that do not cause, have the reasonable potential to cause, or contribute to an in-stream excursion above any applicable state of federal water quality objective / criteria or cause acute or chronic toxicity in the receiving water are authorized to discharge under the conditions set forth in the General Board Order. The Regional Water Board finds that General Board Order No. 2006-0008-DWQ provides adequate water quality protection and compliance monitoring for utility vault and underground structure discharges and that such discharges may continue to be regulated under that General Board Order.
9. On May 14, 1998 the Regional Water Board adopted General Board Order No. 98-300 (NPDES Permit No. CAG677001) to regulate discharges of hydrostatic test water to surface waters. The Regional Water Board recently rescinded this General Board Order via Board Order No. R7-2009-0029. Entities or individuals seeking to discharge hydrostatic test waters shall apply for coverage under this new General Board Order (R7-2009-0300).

## II. NOTIFICATION REQUIREMENTS

- A. General Permit Application Requirements.** Dischargers seeking coverage under this General Board Order shall submit the following information to the Regional Water Board: (1) Notice of Intent (NOI); (2) results of wastewater sampling; (3) proposed practices to comply with effluent limitations, if applicable; (4) Best Management Practices (BMP) Plan or Control Strategy Plan; (5) categorical exception data, if applicable; and (6) filing fee, plus applicable surcharge(s). Dischargers expecting to have multiple discharges over an established period need only submit one NOI but must specify in the NOI the project description, estimates of the number, frequency, rate and types of discharges expected to the receiving water body(ies). The Discharger's annual report as described in section X.E of the Monitoring and Reporting Program (Attachment E) shall provide information on the actual discharges.

- 1. Notice of Intent.** Dischargers eligible to seek coverage under this General Board Order shall submit to the Executive Officer a completed NOI, as detailed in Attachment C. The NOI requires the Discharger to submit the following information:
  - a. General project or facility information;
  - b. Indication of discharge type(s), discharge period(s) (duration), proposed rate of discharge(s), and whether the discharge(s) is/are continuous or intermittent;
  - c. Indication that the wastewater discharges from drainage of ornamental pools, golf course lakes, and impounded water do not contain pesticides, insecticides, biocides, and/or other chemicals that may have been applied to the wastewater;
  - d. Description of the discharge location;
  - e. Information concerning the receiving water body(ies);
  - f. Map (local and/or regional) showing project location(s), discharge points with latitude and longitude, the receiving waterbody with identifying information, and the location of any treatment or disposal systems;
  - g. A copy of the letter of acceptance or permit from the agency (e.g., municipality, water district, or other special district) responsible for the discharge location to allow the discharge into their drainage system, if applicable;
  - h. List of primary pollutants / parameters likely to be contained in the discharge(s);
  - i. Indication that a representative sample of the proposed effluent was taken and whether screening level for any parameter analyzed was exceeded;
  - j. Indication of ability to continuously comply with effluent limits and other requirements of the General Board Order;
  - k. Description of treatment or disposal system, BMPs, or other control strategies;
  - l. Categorical exception information (if applicable);
  - m. Explanation of why a discharge to surface water is the only feasible method for disposing of the effluent supported by a letter from the local publicly owned treatment works (POTW) stating that they cannot accept the discharge; and
  - n. The appropriate filing fee, plus applicable surcharge(s).
- 2. Sampling Requirements.** All Dischargers are required to analyze the proposed discharge for the priority pollutants regulated under the California Toxics Rule (CTR), which are specified in Attachment B, except for those dischargers approved for a categorical exception authorized by section 5.3 of the SIP. Dischargers may also be

required to analyze their discharges for a few conventional and non-conventional pollutants the Regional Water Board believes are likely to be present in low threat discharges regulated by this General Board Order. These pollutants are also listed in Attachment B. Dischargers of wastewater from water system-related activities and other low threat discharge activities must also sample for total residual chlorine (or dechlorinating agent). If the surface waterbody to receive the proposed direct discharge is impaired, as identified in the latest CWA section 303(d) List,<sup>5</sup> the Discharger shall also analyze for the constituent(s) causing the impairment(s). Finally, applicants proposing to discharge low threat wastewaters to specific waterbodies and waterbodies with certain beneficial use designations must also sample the effluent, upstream receiving water, and downstream receiving water for a few additional parameters specified in the *Water Quality Control Plan for the Colorado River Basin* (Basin Plan) and summarized in Attachment B.

Attachment B contains screening levels for priority pollutants with applicable water quality criteria. Since this General Board Order covers low threat discharges to all surface waters in the Colorado River Basin Region, the screening levels are based on the most restrictive water quality objectives / criteria. Dischargers who exceed a screening level for a priority pollutant, where they are provided in Attachment B, will not be eligible for coverage under this General Board Order and will need to apply for an individual NPDES permit.

Attachment B also contains screening levels for total residual chlorine for discharges from water system-related activities and other low threat discharge activities; pathogens for discharges to waterbodies designated as REC-I or REC-II, segments of the Colorado River designated as REC-I or REC-II, and the New River; and TSS for dischargers to the New River. Dischargers who exceed applicable screening levels or whose discharge appears to the Regional Water Board to have the potential to cause or contribute to an exceedance of a water quality standard will be subject to effluent limitations. The Executive Officer of the Regional Water Board will specify the effluent limitations as listed in section V. Effluent Limitations and Discharge Specifications of this permit to which the Discharger is subject in the Notice of Applicability (NOA).

If the results of analysis for a discharge to an impaired water body listed on the 303(d) List indicate that pollutant concentrations in the discharge have the reasonable potential to contribute to the impairment, the discharge will not be authorized by this General Board Order.

- 3. Proposed Approach to Comply.** Dischargers who exceed an applicable screening level in Attachment B, are required to indicate how they will comply with section V. Effluent Limitations and Discharge Specifications in the General Board Order for the applicable parameters, either through BMPs, or other control strategies.
- 4. Best Management Practices Plan or Control Strategy Plan.** To ensure that all enrollees are implementing practices to protect water quality, all Dischargers are

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<sup>5</sup> The list of WQLSs may be found under the CWA section 303(d) List at [http://www.swrcb.ca.gov/water\\_issues/programs/tmdl/303d\\_lists2006\\_epa.shtml](http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml).

required to develop and implement a BMP or Control Strategy Plan and have it available for inspection by the Regional Water Board. The elements of the Discharger's BMP Plan shall be consistent with the general guidance contained in the United States Environmental Protection Agency's (USEPA) *Guidance Manual for Developing Best Management Practices* (BMPs) (EPA 833-B-93-004). Dischargers may also consult the California Stormwater Best Management Practice Handbooks developed by the California Stormwater Quality Association, available at <http://www.cabmphandbooks.org/>, and other documents for guidance on addressing site-specific discharge situations. Dischargers exceeding the applicable screening levels for discharges from water system-related activities, hydrostatic test water discharges and other low threat discharge activities and screening levels for pathogens and TSS for discharges to specific waterbodies contained in Attachment B are required to submit the BMP or Control Strategy Plan with the NOI.

**5. Categorical Exceptions for Priority Pollutant Criteria and Objectives.** Section 5.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) allows the Regional Water Board to allow certain Dischargers short-term or seasonal exceptions from meeting priority pollutant criteria and objectives for discharges that are necessary to implement control measures that fulfill statutory requirements regarding drinking water. Dischargers applying for a categorical exception to the priority pollutant criteria and objectives, as authorized by section 5.3 of the SIP, must notify potentially affected public and governmental agencies and must submit the following information with a completed NOI to the Regional Water Board:

- a. A detailed description of the proposed action, including the proposed method of completing the action;
- b. A time schedule;
- c. A discharge and receiving water quality monitoring plan (before project initiation, during the project, and after project completion, with the appropriate quality assurance and quality control procedures);
- d. CEQA documentation;
- e. Contingency plans;
- f. Identification of alternate water supply (if needed); and
- g. Residual waste disposal plans.

To prevent unnecessary delays in taking emergency actions or to expedite the approval process for expected or routine activities that fall under categorical exceptions, the Discharger is advised to file with the Regional Water Board, in advance of seeking Regional Water Board approval, the information required in items (a)-(g) above, to the extent possible.

The Regional Water Board will review the above submitted information and will determine whether the Discharger qualifies and meets the requirements in section 5.3 of the SIP for a categorical exception to the priority pollutant criteria. If no exception is granted, the Discharger will be required to analyze the proposed discharge for all of the CTR constituents listed in Tables B-2 and B-3 of Attachment B and submit the analytical test results to the Regional Water Board.

Upon Executive Officer determination that the Discharger has submitted the information necessary for qualification under section 5.3 of the SIP for a categorical exception to the priority pollutant criteria, the submitted information will be made available for public review and comment for 30 days.

- i. If there is no objection after the public review and comment period, the Executive Officer will issue an authorization letter to the Discharger making the approved application for categorical exception an enforceable part of the General Board Order.
- ii. If a written request for a hearing on the application for categorical exception is received within the 30-day public review and comment period, which includes the reason(s) the hearing is being requested (e.g., why the application for categorical exception is inadequate), the item will be placed on the next available Regional Water Board meeting agenda. Because of the need to comply with certain minimum noticing requirements, placement of this item on the agenda will be at least 30 days from the date when a hearing is requested plus the additional time necessary to follow the administrative procedures involved in preparing for the meeting.
- iii. If possible, the Regional Water Board staff will attempt to resolve the issues of concern by arranging a meeting with the applicant and the interested person(s) requesting the hearing. If an agreement is reached in the meeting, a hearing may not be required. If the agreement reached requires significant changes to be made to the submitted application, however, a new public notice and comment period will be required. If an agreement is not reached with the interested person(s) requesting the hearing, the hearing will proceed as scheduled. After testimony is taken at the hearing, the Regional Water Board will decide whether permit coverage shall commence or whether the submitted application for categorical exception needs to be revised.

**6. Filing Fee.** In addition to the material outlined in items II.A.1 through 5 above, Dischargers shall submit the current State Water Board adopted permit fee, plus applicable surcharge(s). Information concerning current annual permit fees may be found at <http://www.waterboards.ca.gov/resources/fees>.

**7. Application Period and Notice of Applicability.** Dischargers seeking coverage under this General Board Order shall file a completed NOI (with appropriate attachments) at least 45 days prior to the proposed discharge. Upon receipt of the NOI, the Executive

Officer shall determine the applicability of this General Board Order to the discharge. If the discharge is deemed eligible for coverage, the Executive Officer shall issue a NOA to the Discharger specifying whether the discharge is authorized under the terms and conditions of this General Board Order. Discharges shall not commence until after receiving the Executive Officer's written NOA or until the Regional Water Board has issued an individual NPDES permit for the discharge. The NOA will be written to apply to a project for those Dischargers that propose in their NOIs to have more than one discharge of the same type, rate, and duration to the same water body over an established time period.

## **B. Discharge Description**

Individuals and miscellaneous public and private entities often need to discharge clean or relatively pollutant-free wastewater. This wastewater poses an insignificant or minimal (i.e., *low threat*) to water quality. This General Board Order is designed to cover low threat discharges to surface waters of the United States.

## **C. Discharge Points and Receiving Waters**

There may be multiple discharge points and receiving waters under this General Board Order. Therefore, the Regional Water Board is requesting information regarding discharge points and receiving waters in the NOI. Agencies with multiple discharge points may submit a regional or service area map. Locations for discharges that are continuous for more than 24 hours will need to be provided in the NOI or in a supplemental letter. The Executive Officer will specify specific discharge points and receiving water information in each NOA.

## **D. Eligible Discharges**

This General Board Order covers discharges to surface waters within the Colorado River Basin Region of low threat wastewaters occurring in the following activity categories: (1) Water System-Related, (2) Dewatering, (3) Groundwater Extraction, and (4) Other. Section I.B of this Fact Sheet provides examples of specific activities within each of these categories.

To be authorized under this General Board Order, a Discharger must demonstrate the following:

1. Pollutant concentrations in the discharge shall not (i) cause, (ii) have the reasonable potential to cause, or (iii) contribute to an excursion above any applicable water quality objective;
2. A representative sample of the discharge does not exceed the screening levels contained in Attachment B or that the Discharger can comply with the effluent limitations for constituents contained in section V, Effluent limitations and Discharge Specifications;
3. The discharge does not include water added for the purpose of diluting pollutant concentrations; and



4. The Discharger is able to comply with all the terms and provisions of this General Board Order.

## E. Summary of Existing Requirements

This General Board Order is designed to cover low threat discharges to surface waters (see section I.B of this Fact Sheet for examples) to the extent the discharges are not already covered under an individual NPDES permit or other State Water Board or Regional Water Board-wide General Board Order (see Table F-1 under section I.B.2 above). As discussed under section I.B.9 of this Fact Sheet, General Board Order No. 98-300 covering the discharges of hydrostatic test waters to surface waters was rescinded on March 19, 2009 (Board Order No. R7-2009-0029). Going forward, dischargers of hydrostatic test waters shall apply for coverage under this proposed General Board Order (R7-2009-0300, NPDES Permit No. CAG997001).

The effluent limitations contained in General Board Order No. 98-300 are summarized in Table F-2 below and continued in this permit for hydrostatic test water discharges.

**Table F-2. Historic Effluent Limitations**

| Parameter                | Units          | Maximum Value |
|--------------------------|----------------|---------------|
| pH                       | standard units | 6.0 – 9.0     |
| Suspended Solids         | mg/L           | 95            |
| BOD <sub>5</sub> @ 20° C | mg/L           | 55            |
| Oil and Grease           | mg/L           | 25            |
| Turbidity                | NTU            | 75            |
| Settleable Solids        | ml/L           | 0.2           |
| Residual Chlorine        | mg/L           | 0.1           |

mg/L = milligrams per liter

NTU = Nephelometric Turbidity Units

ml/L = milliliters per liter

## III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed General Board Order are based on the requirements and authorities described in this section.

### A. Legal Authorities

This General Board Order is issued pursuant to section 402 of the federal CWA and implementing regulations adopted by USEPA and chapter 5.5, division 7 of the California Water Code (CWC), commencing with section 13370. It shall serve as a general NPDES permit for point source discharges of low threat wastewaters to surface waters. This

General Board Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the CWC, commencing with section 13260.

## **B. California Environmental Quality Act (CEQA)**

Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, Public Resources Code, sections 21100 through 21177.

To satisfy the categorical exception requirements of section 5.3 of the SIP, Dischargers seeking enrollment under this General Board Order are required to submit project-specific information to the Executive Officer on the discharge and its water quality effects. This information is specified in section II.A.4 of this Fact Sheet and in Attachment C (NOI Form).

## **C. State and Federal Regulations, Policies, and Plans**

**1. Water Quality Control Plans.** The Regional Water Board adopted the Basin Plan on November 17, 1993 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (includes amendments adopted by the Regional Water Board to date). In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The existing and potential beneficial uses of the various surface waters that could be impacted by the discharge of low threat wastewaters in the Colorado River Basin Region include one or more of the following:

- Agricultural supply (AGR)
- Aquaculture (AQUA)
- Cold freshwater habitat (COLD)
- Freshwater replenishment (FRSH)
- Ground water recharge (GWR)
- Hydropower generation (POW)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)
- Non-contact water recreation (REC-II)
- Preservation of rare, threatened, or endangered species (RARE)
- Warm freshwater habitat (WARM)
- Water contact recreation (REC-I)
- Wildlife habitat (WILD)

Requirements of this General Board Order implement the Basin Plan.

**2. Thermal Plan.** The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on May 18, 1972 and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. The Regional Water Board does not consider the low threat wastewaters regulated by this

General Board Order to contain thermal or elevated temperature wastes. Additionally, because agricultural drainage channels do not have a “natural” receiving water temperature, the Thermal Plan is not applicable to them. The channels comprise a significant number of receiving waterbodies in the Colorado River Basin. This General Board Order, therefore, does not implement the Thermal Plan.

- 3. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- 4. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the SIP. The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control.

Section 5.3 of the SIP authorizes the Regional Water Board, after compliance with CEQA, to allow certain dischargers short-term or seasonal exceptions from meeting the priority pollutant criteria and objectives if the Regional Water Board determines the discharge is necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code.

This General Board Order contains a process for Regional Board and public review for those Dischargers who submit the information required by section 5.3 of the SIP for categorical exception to the criteria and objectives in the CTR and SIP, as outlined in Attachment C.

In addition, as required by the SIP, Dischargers authorized to discharge under this General Board Order with a categorical exception to the priority pollutant criteria and objectives must provide certification by a qualified biologist that the receiving water beneficial uses have been restored upon cessation of the discharge and prior to termination of the permit. This General Board Order requires full compliance with the requirements of the CTR and SIP for all other authorized discharges. Requirements of this General Board Order implement the SIP.

- 5. Endangered Species Act.** This General Board Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now

prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (California Fish and Game Code section 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This General Board Order requires compliance with effluent limits, receiving water limitations, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all applicable requirements of the Endangered Species Act.

6. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes [40 CFR. 31.21, 65 Fed. Reg. 24641 (April 27, 2000)]. Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
7. **Antidegradation Policy.** Section 131.12 (40 CFR 131.12) requires that state water quality standards include an antidegradation policy consistent with federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR 131.12 and Resolution No. 68-16. As discussed in section IV.D.5 of this Fact Sheet, the discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
8. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Compliance with the anti-backsliding requirements is discussed in section IV.D.6 of this Fact Sheet.

#### **D. Impaired Water Bodies on CWA 303(d) List**

Under section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of water quality limited segments (WQLSs). The waters on these lists do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. On November 30, 2006, USEPA gave final approval to California's 2006 section 303(d) list of impaired waters (303(d) List). CWA section 303(d) further mandates that once waters are impaired by a particular constituent, the NPDES permitting authority is to develop total maximum daily loads (TMDLs) for the impaired water body. A TMDL is the maximum amount of pollution that a waterbody can assimilate without violating state water quality standards.

The 2006 303(d) List classifies the Imperial Valley Drains as impaired by five pesticides and one metal. Respectively, the pollutants include dieldrin, DDT, endosulfan, PCBs, toxaphene, and selenium. The Regional Water Board has not yet developed TMDLs for these parameters.<sup>6</sup> The Imperial Valley Drains had previously been listed as impaired for sedimentation / siltation. USEPA has approved a sedimentation / siltation TMDL for the Imperial Valley Drains. The TMDL requires discharges from point sources to not exceed the TSS limits and corresponding mass loading rates as specified at 40 CFR 122, *et seq.* It also requires monitoring for TSS during each discharge event. Imperial Valley Drains discharge to two major water bodies: the New River and the Alamo River.

The New River is listed as impaired by the following: (1) toxic organics (1,2,4-trimethylbenzene, 1,2-dichlorobenzene, chloroform, cymene, and toluene); (2) pesticides (chlordane, chlorpyrifos, DDT, diazinon, dieldrin, PCBs, and toxaphene); (3) xylenes (m,p-xylenes and o-xylenes); (4) metals (copper and mercury); (5) nutrients; (6) dissolved oxygen; (7) toxicity; and (8) trash. TMDLs for these various parameters are under development by the Regional Water Board. The New River is also listed as impaired for bacteria and sediment / siltation. USEPA has approved the Regional Water Board's TMDLs for these parameters. These TMDLs establish waste load allocations (WLAs) for fecal coliform, E. coli, enterococci, and sediment. The established receiving water limitations for fecal coliform, E. coli, enterococci, and TSS in this General Board Order comply with the WLAs established in the New River TMDLs. A Trash TMDL for the New River has been approved by the Regional Water Board and State Water Board, the Office of Administrative Law and USEPA. The TMDL essentially establishes a prohibition on the discharge of any trash to the New River by point sources. This General Board Order prohibits discharges of trash to the New River.

The Alamo River is listed as impaired by: (1) pesticides (chlorpyrifos, DDT, dieldrin, PCBs, and toxaphene); (2) metals (selenium); and (3) sediment / silt. USEPA has approved a sedimentation / siltation TMDL for the Alamo River. The requirements of this General Board Order are consistent with the WLAs contained in the sedimentation / siltation TMDL for the Alamo River.

The 303(d) List classifies segments of the Coachella Valley Storm Water Channel as impaired by pathogens and toxaphene. A TMDL has not yet been developed for toxaphene, but one is under development for pathogens.

The Colorado River (Imperial Reservoir to California-Mexico border) is listed as impaired for selenium (metal). The Palo Verde Outfall Drain and Lagoon is listed as impaired for pathogens and DDT (pesticide). TMDLs have not yet been developed for these parameters.

Finally, the Salton Sea is listed as impaired by: (1) nutrients, (2) salt, and (3) metals (selenium). No TMDLs have been developed to date for the Salton Sea, although a nutrient TMDL is under development. Tributaries to the Salton Sea, including the Coachella Valley Storm Channel and Imperial Valley Drains, may be affected by the

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<sup>6</sup> The schedule for TMDL development may be found at  
[http://www.swrcb.ca.gov/water\\_issues/programs/tmdl/303d\\_lists2006\\_epa.shtml](http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml).

nutrient TMDL and any others developed for the Salton Sea. Furthermore, the Basin Plan establishes selenium objectives for tributaries to the Salton Sea.

#### **E. Other Plans, Policies and Regulations – Not Applicable**

### **IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

Effluent limitations and toxic and pretreatment effluent standards established pursuant to sections 301 (effluent limitations), 302 (water quality related effluent limitations), 304 (information and guidelines), and 307 (toxic and pretreatment effluent standards) of the CWA and amendments thereto are applicable to discharges under this General Board Order.

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements via NPDES permits. There are two principal bases for effluent limitations in the *Code of Federal Regulations*: sections 122.44(a) and 122.44(d). Section 122.44(a) requires that permits include applicable technology-based limitations and standards, and section 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where receiving water has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs may be established.

Effluent and receiving water limitations in this General Board Order are based on the federal CWA, Basin Plan, State Water Board's plans and policies, USEPA guidance and regulations, and best practicable waste treatment technology. While developing effluent limitations and receiving water limitations, monitoring requirements, and special conditions for the draft permit, the following information sources were used:

1. Title 40 of the *Code of Federal Regulations*;
2. Water Quality Control Plan (Colorado River Basin – Region 7) as amended to date;
3. General Board Order No. 98-300 (*NPDES Permit and General WDRs for Discharge of Hydrostatic Test Water to Surface Waters*); and
4. Other State Water Board-wide or Regional Water Board-wide General Orders regulating low threat discharges to surface waters.

#### **A. Discharge Prohibitions**

1. This General Board Order prohibits the following:
  - a. The discharge of treated wastewater at a location or in a manner different from that described by the Discharger in the NOI application or as authorized by the Executive Officer;

- b. The bypass or overflow of low threat wastewaters to waters of the United States, except as allowed under the Standard Provisions for NPDES permits (hereinafter Standard Provisions), which are included as Attachment D to this General Board Order;
- c. The Discharger from extracting, accepting, or treating waste in excess of the BMPs or Control Strategy Plan or disposal capacity of the system as specified in the Discharger's NOA from the Executive Officer;
- d. The discharge of wastes causing degradation of any water supply unless in compliance with Resolution No. 68-16;
- e. The treatment or disposal of wastes from the facility or project site that cause pollution or nuisance as defined in section 13050, subdivisions (l) and (m), respectively, of the California Water Code;
- f. The discharge of any substances in concentrations toxic to animal or plant life; and
- g. The discharge of trash to the New River.

These prohibitions are based on the requirements of the CWA, Basin Plan, State Water Board plans and policies, and USEPA guidance and regulations.

- 2. The discharge prohibitions contained in General Board Order No. 98-300 (*NPDES Permit and General WDRs for Discharge of Hydrostatic Test Water to Surface Waters*) are encompassed by the prohibitions outlined in section IV.A.1 above. Therefore, the prohibitions of Order No. 98-300 are carried forward in this General Board Order.

## **B. Technology-Based Effluent Limitations**

### **1. Scope and Authority**

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary, to meet applicable water quality standards. The discharges authorized by this General Board Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with section 125.3.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable

within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including five-day biochemical oxygen demand (BOD<sub>5</sub>), TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the *cost reasonableness* of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. CWA section 402(a)(1) and 40 CFR 125.3 authorize the use of best professional judgment to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR 125.3.

## **2. Applicable Technology-Based Effluent Limitations**

The low threat discharges authorized by this General Board Order are considered high-quality wastewaters that are relatively pollutant-free and pose a low threat to water quality. Because of the potential diversity of low threat discharges, this General Board Order does not establish technology-based effluent limitations based on any specific treatment technologies. According to 40 CFR 122.44(k), BMPs can be required in lieu of technology-based effluent limitations when numeric effluent limitations are infeasible. Therefore, based on BPJ, BMPs will serve as the equivalent of technology-based effluent limitations in order to carry out the purposes and intent of the CWA. All Dischargers under this General Board Order shall develop and implement a BMP or Control Strategy Plan and have it available for review by the Regional Water Board. The elements of the Discharger's BMP Plan shall be consistent with the general guidance contained in the United States Environmental Protection Agency's (USEPA) *Guidance Manual for Developing Best Management Practices* (BMPs) (EPA 833-B-93-004). Dischargers may also consult the California Stormwater Best Management Practice Handbooks developed by the California Stormwater Quality Association, available at <http://www.cabmphandbooks.org/>, and other documents for guidance on addressing site-specific discharge situations. Any Discharger that exceeds an applicable screening level in Attachment B is required to submit the BMP or Control Strategy Plan to the Regional Water Board with the completed NOI.



## C. Water Quality-Based Effluent Limitations (WQBELs)

### 1. Scope and Authority

Section 301(b) of the CWA and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs, when necessary, is intended to protect the designated uses of the receiving water as specified in the Basin Plan. It is also intended to achieve applicable water quality objectives and criteria that are contained in other state plans and policies or in the CTR and NTR.

### 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

- a. **Receiving Waters.** Low threat wastewaters may potentially be discharged to all surface waters in the Colorado River Basin. The designated beneficial uses of surface waters throughout the Basin Region are summarized in section III.C.1 of this Fact Sheet.
- b. **Hardness.** While no effluent limitation for hardness is necessary in this General Board Order, hardness is critical to the assessment of reasonable potential for certain metals. The CTR, at section (c)(4), states the following:

“Application of metals criteria. (i) For purposes of calculating freshwater aquatic life criteria for metals from the equations in paragraph (b)(2) of this section, for waters with a hardness of 400 mg/L or less as calcium carbonate, the actual ambient hardness of the surface water *shall* be used in those equations.”  
[Emphasis added]

The State Water Board, in footnote 19 to Water Quality Order No. 2004-0013,<sup>7</sup> stated, “*We note that...the Regional Water Board...applied a variable hardness value whereby effluent limitations will vary depending on the actual, current*

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<sup>7</sup> State of California, State Water Resources Control Board, Order WQO 2004-0013, *In the Matter of the Petition of Yuba City for Review of Waste Discharge Requirements Order No. R5-2003-0085 and Cease and Desist Order No. R5-2003-0086 Issued by the California Regional Water Quality Control Board, Central Valley Region, SWRCB/OCC FILE A-1580.*

*hardness values in the receiving water. We recommend that the Regional Water Board establish either fixed or seasonal effluent limitations for metals, as provided in the SIP, rather than 'floating' effluent limitations."*

This General Board Order does not authorize discharges that have the reasonable potential to exceed water quality objectives for priority pollutants. Therefore, screening levels must be set to protect the beneficial uses of the receiving water for all discharge conditions. In the absence of the option of including condition-dependent, "floating" screening levels that are reflective of actual conditions at the time of discharge, effluent limitations must be set using a reasonable worst-case condition in order to protect beneficial uses for all discharge conditions. Dependent on receiving water conditions, use of either the lowest observed effluent hardness or the lowest observed receiving water hardness may be more protective of aquatic life beneficial uses. For example, under effluent dominated discharge conditions, use of the lowest observed effluent hardness is the most protective.

This General Board Order includes screening levels for cadmium, chromium III, copper, lead, nickel, silver, and zinc, each of which is dependent on water hardness. The CTR expresses the objectives for these metals through equations where the hardness of the receiving water is a variable. To simplify the permitting process, it was necessary to use fixed hardness values in these equations. To calculate screening levels for waters with hardness concentrations less than 200 mg/L, a hardness value of 100 mg/L was used. To calculate screening levels for waters with hardness concentrations greater than or equal to 200 mg/L but less than 300 mg/L, a hardness value of 250 mg/L was used. To calculate screening levels for waters with hardness concentrations greater than or equal to 300 mg/L but less than 400 mg/L, a hardness value of 350 mg/L was used. Finally, to calculate screening levels for waters with hardness concentrations greater than or equal to 400 mg/L, a hardness value of 400 mg/L was used.

This General Board Order requires the Discharger to analyze the proposed effluent and the receiving water for hardness. The Discharger shall submit the analytical results with the NOI and propose an appropriate hardness concentration based on the analytical results and site-specific receiving water conditions. Upon approval of the Executive Officer, this hardness value will be used to determine the appropriate screening levels contained in Attachment B.

- c. Assimilative Capacity / Mixing Zone.** The effluent limitations for low threat discharges were calculated assuming no dilution. In general, the low threat discharges covered by this General Board Order do not flow directly into receiving waters with significant volume to consider a dilution credit or to allocate a mixing zone. Many creeks and streams in the Colorado River Basin Region are dry during the summer months. Therefore, for many months of the year, these discharges may represent all or nearly all of the flow in some portions of the receiving creeks or streams. Because this General Board Order is intended to serve as a General NPDES Permit and covers discharges to all surface waters in the Colorado River Basin, the effluent limitations established pursuant to this General Board Order are established to achieve the most protective water quality objective for the surface

water beneficial uses in the Colorado River Basin. Therefore, the Regional Water Board has assumed no assimilative capacity and, thus, has not granted any dilution credits.

An exception to this assumption may be applied based on the demonstration of a mixing zone in accordance with section 1.4.2 of the SIP and an approved mixing zone study demonstrating compliance with water quality objectives in the receiving water as prescribed in the Basin Plan. This exception process is more appropriate for an individual rather than a general board order. A general board order should be protective of the most stringent water quality objectives and beneficial uses. If a Discharger requests that a dilution credit be included in the computation of an effluent limitation or that a mixing zone be allowed, an individual order will be required. However, if no mixing zone is proposed, this General Board Order provides coverage for all low threat discharges to receiving waters in the Colorado River Basin Region.

### **3. Determining the Need for WQBELs**

- a. CWA section 301(b)(1) requires NPDES permits to include WQBELs if technology-based effluent limitations are not sufficiently stringent to meet applicable water quality criteria. Water quality standards include Regional Water Board Basin Plan beneficial uses and narrative and numeric water quality objectives, State Water Board adopted standards, and federal standards, including the CTR and NTR. The Basin Plan establishes narrative and numeric objectives for a variety of parameters or receiving water conditions for: (i) all waterbodies; (ii) specific beneficial uses; and (iii) specific waterbodies.
- b. Federal regulations require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numerical water quality standard.
- c. **All Low Threat Discharges**
  - i. **pH.** The Basin Plan includes a water quality objective for surface waters that *"Since the regional waters are somewhat alkaline, pH shall range from 6.0-9.0. Discharges shall not cause any changes in pH detrimental to beneficial uses."* Effluent Limitations for pH are included in this General Board Order for all low threat discharges based on the Basin Plan objectives for pH.
  - ii. **Priority Pollutants.** This General Board Order is not intended to regulate discharges that have the reasonable potential to exceed water quality standards for priority pollutants, which would be more appropriately regulated by an individual board order. Since this is a general board order for all low threat discharges to surface waters in the Colorado River Basin of California, this General Order establishes screening levels in Attachment B that are protective of beneficial uses under all discharge conditions and are based on the most protective water quality criteria for priority pollutants contained in the CTR.

Dischargers enrolling under this General Board Order are required to analyze the proposed discharge for constituents regulated under the CTR and submit the results as part of the NOI, except for those dischargers approved for a categorical exception authorized by section 5.3 of the SIP. If the analytical data demonstrate that any constituent concentrations in the discharge exceed the water quality screening levels listed in Attachment B, the discharge will not be allowed under this General Board Order. If all constituent concentrations are below the screening levels listed in Attachment B, the discharge will be authorized for coverage under this General Board Order.

Given the wide range of uses throughout the Colorado River Basin Region, this General Board Order establishes screening levels for discharges based on the beneficial uses of the receiving waters: (1) those where the receiving waters are designated to support domestic and municipal supply (MUN) and (2) those where the receiving waters are designated for all other uses except domestic and municipal supply (non-MUN). The screening levels for discharges to receiving waters designated as MUN are based on the more stringent of (1) human health water quality criteria based on consumption of water and organisms as contained in the CTR and (2) freshwater aquatic life water quality criteria as contained in the CTR. The screening levels for discharges to receiving waters designated as non-MUN are based on the more stringent of (1) human health water quality criteria based on consumption of organisms only as contained in the CTR and (2) freshwater aquatic life water quality criteria as contained in the CTR.

The Discharger is required to analyze a representative sample of the discharge. The Regional Water Board shall conduct a Reasonable Potential Analysis (RPA) of the priority pollutants in accordance with section 1.3, step 7, of the SIP by comparing the analytical results to the screening levels contained in Attachment B. If the analytical data demonstrate that constituent concentrations in the discharge exceed the water quality screening levels listed in Attachment B (Tables B-2 and B-3), the Discharger will not be covered by this General Board Order and will need to apply for an individual permit.

Several priority pollutants do not have CTR criteria. These pollutants include asbestos (non-MUN only), beryllium, chloroethane, 2-chloroethylvinyl ether, chloroform, 1,1-dichloroethane, methyl chloride, 1,1,1-trichloroethane, 2-nitrophenol, 4-nitrophenol, 3-methyl-4-chlorophenol, acenaphthylene, benzo(ghi)perylene, bis(2-chloroethoxy)methane, 4-bromophenyl phenyl ether, 4-chlorophenyl phenyl ether, 2,6-dinitrotoluene, di-n-octyl phthalate, naphthalene, phenanthrene, 1,2,4-trichlorobenzene, and delta-BHC. Due to the generally short-term and low volume nature of the discharges covered by this General Board Order and the lack of applicable criteria, screening levels for these pollutants are not established in this General Board Order.

**d. Discharges from Water System-Related Activities and Other Low Threat Discharge Activities**

- i. **Chlorine, Total Residual.** Discharges from water system-related activities and other low threat discharge activities may contain chlorine, which is extremely toxic to aquatic organisms. USEPA's *National Ambient Water Quality Criteria for the Protection of Freshwater Aquatic Life (NAWQC)* recommend 4-day average (chronic) and 1-hour average (acute) criteria for chlorine of 0.019 mg/L and 0.011 mg/L, respectively. Table B-5 of Attachment B contains a screening level of 0.011 mg/L for discharges from water system-related activities and other low threat discharge activities. Discharges that exceed the screening level for chlorine will be subject to effluent limitations, as specified in the NOA from the Executive Officer.

The Regional Water Board calculates effluent limitations for CTR and non-CTR parameters using the procedures outlined in the SIP and the USEPA *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001), which contain statistical methods for converting chronic (4-day) and acute (1-hour) aquatic life criteria to average monthly and maximum daily effluent limitations based on the variability of the existing data and the expected frequency of monitoring. However, because projects likely to be granted coverage under this General Board Order will typically be short in duration, reasonable potential exists for acute toxicity, and average 1-hour and 4-day limitations for chlorine are more appropriate than average monthly and maximum daily effluent limitation for such discharges. In order to protect the beneficial uses of the receiving waters throughout the Colorado River Basin Region, this General Board Order establishes an average 1-hour effluent limitation of 0.019 mg/L and an average 4-day effluent limitation of 0.011 mg/L for chlorine for discharges from water system-related activities and other low threat discharge activities.

Regional Water Board General Order No. 98-300 established an effluent limitation for total residual chlorine of 0.1 mg/L as a maximum. Based on the rationale above, the Regional Water Board is revising the effluent limitation to be consistent with the NAWQC, resulting in more stringent effluent limitations.

The San Francisco Regional Water Board included a reporting level of 0.08 mg/L to determine compliance with the effluent limitations contained in the General Order for Discharges from Surface Water Treatment Facilities for Potable Supply (Order No. R2-2003-0062, NPDES No. CAG382001). The reporting level of 0.08 mg/L represents a level that handheld field meters are capable of achieving. The Regional Water Board concurs with the approach used by the San Francisco Regional Water Board. Therefore, this Order requires Dischargers to use a method capable of achieving a reporting level of 0.08 mg/L, consistent with the reporting level required by the San Francisco Regional Water Board, until the State Water Board adopts a statewide policy with a specified reporting level achievable in the field and laboratory. A reopener provision has been included in

this General Board Order that will allow the Regional Water Board to reopen and modify the permit if a statewide policy for total residual chlorine takes effect.

- e. **Hydrostatic Test Water Discharges and Dewatering Activities.** This General Board Order carries forward the effluent limitations set in the previous General Board Order 98-300 for hydrostatic test water discharges.

An effluent limitation for Total Petroleum Hydrocarbons has been added for activities where diesel or gasoline powered generator is used in dewatering activities.

- f. **Low Threat Discharges to Specific Waterbodies.** The Basin Plan establishes water quality objectives for E. coli in waterbodies designated as REC-I or REC-II and segments of the Colorado River designated as REC-I or REC-II. The Basin Plan also contains waste load allocations (WLAs) for E. coli, enterococci, and fecal coliform organisms and TSS applicable to discharges to the New River based on the New River Pathogen TMDL and the New River Sedimentation/Siltation TMDL. All applicants proposing to discharge to one of the applicable receiving waters shall sample their effluent for the identified parameters as specified in Attachment B. If the analytical data demonstrate that constituent concentrations in the discharge exceed the water quality screening levels listed in Tables B-8 through B-10 of Attachment B, or appear to cause or contribute to an exceedance of a water quality standard in the receiving water, the Discharger shall submit their plan for compliance and a BMP or Control Strategy Plan with the NOI demonstrating how the Discharger will comply with the effluent limitations in this General Board Order. The Executive Officer will specify the effluent limitations applicable to a Discharger in the NOA.
- i. **Discharges to Waters Designated as REC-I.** The Basin Plan contains a water quality objective that specifies that the geometric mean bacterial density for E. coli (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed 126 Most Probable Number (MPN) per 100 milliliters (mL), nor shall any sample exceed the maximum allowable bacterial density of 400 MPN/100 mL in waters designated as REC-I. Effluent limitations for E. coli for discharges to waters designated as REC-I are included in this General Board Order based on Basin Plan objectives. A screening level of 126 MPN/100 mL is included in Attachment B.
- ii. **Discharges to Waters Designated as REC-II.** The Basin Plan specifies that the geometric mean bacterial density for E. coli (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed 630 MPN/100 mL, nor shall any sample exceed the maximum allowable bacterial density of 2,000 MPN/100 mL in waters designated as REC-II. Effluent limitations for E. coli for discharges to waters designated as REC-II are included in this General Board Order based on Basin Plan objectives. A screening level of 630 MPN/100 mL is included in Attachment B.
- iii. **Discharges to Segments of the Colorado River Designated as REC-I.** The Basin Plan specifies that the geometric mean bacterial density for E. coli (based on a minimum of not less than five samples equally spaced over a 30-day period)

shall not exceed 126 MPN/100 mL, nor shall any sample exceed the maximum allowable bacterial density of 235 MPN/100 mL in segments of the Colorado River designated as REC-I. Effluent limitations for *E. coli* for discharges to segments of the Colorado River designated as REC-I are included in this General Board Order based on Basin Plan objectives. A screening level of 126 MPN/100 mL is included in Attachment B.

- iv. Discharges to Segments of the Colorado River Designated as REC-II.** The Basin Plan specifies that the geometric mean bacterial density for *E. coli* (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed 630 MPN/100 mL, nor shall any sample exceed the maximum allowable bacterial density of 1,175 MPN/100 mL in segments of the Colorado River designated as REC-II. Effluent limitations for *E. coli* for discharges to segments of the Colorado River designated as REC-II are included in this General Board Order based on Basin Plan objectives. A screening level of 630 MPN/100 mL is included in Attachment B.
- v. Discharges to the New River.** The New River Pathogen TMDL contained in the Basin Plan specifies that the geometric mean bacterial density for *E. coli* (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed 126 MPN/100 mL, nor shall any sample exceed the maximum allowable bacterial density of 400 MPN/100 mL; the geometric mean bacterial density for enterococci (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed 33 MPN/100 mL, nor shall any sample exceed the maximum allowable bacterial density of 100 MPN/100 mL; and that the geometric mean bacterial density for fecal coliform (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed 200 MPN/100 mL, nor shall more than 10 percent of the total samples during any 30-day period exceed 400 MPN/100 mL for discharges to the New River. The New River Sedimentation/Siltation TMDL contained in the Basin Plan specifies that the concentration of TSS in the New River shall not exceed 200 mg/L as an annual average. Since the TSS effluent limitation is 95 mg/L for the hydrostatic test water discharge, this TSS effluent limitation will also be in effect for the New River. Effluent limitations for *E. coli*, enterococci, fecal coliform organisms, and TSS for discharges to the New River are included in this General Board Order based on the TMDLs contained in the Basin Plan. Screening levels for *E. coli*, enterococci, fecal coliform organisms, and TSS are been included in Attachment B.

#### **4. WQBEL Calculations**

- a.** The effluent limitations for total chlorine residual are based on the Basin Plan's narrative toxicity objective and are applied directly as 4-day and 1-hour average effluent limitations, as discussed in section IV.C.3.d of this Fact Sheet. The effluent limitations for pH are based on the Basin Plan's specific objectives for pH and are applied in this General Board Order as instantaneous effluent limitations.

- b. The effluent limitations based on waterbody specific objectives and TMDLs in the Basin Plan, as presented in section IV.C.3.e above, are applied as specified in the Basin Plan.

## **5. Whole Effluent Toxicity (WET)**

Whole effluent toxicity protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a shorter time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and measures mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate; decreased reproductive success of resident or indicator species; and/or significant alterations in population, community ecology, or receiving water biota.

The discharges authorized by this General Board Order pose a low threat to water quality. Because the discharges authorized by this General Board Order are generally low volume and/or short-term in nature and are not expected to contribute to acute or chronic toxicity, effluent limitations for acute and chronic toxicity and requirements for acute and chronic WET testing are not specified by this General Board Order.

## **D. Final Effluent Limitations**

### **1. Mass-based Effluent Limitations – Not Applicable**

- 2. **Averaging Periods for Concentration-based Effluent Limitations.** Section 122.45(d) [40 CFR 122.45(d)] requires maximum daily and average monthly discharge limitations for all dischargers other than publicly owned treatment works (POTWs) unless impracticable. The Basin Plan objectives for pH and pathogens and the waste load allocations in TMDLs for pathogens and TSS in the New River have been established directly as effluent limitations. The rationale for using alternative averaging periods for chlorine residual is discussed in section IV.C.3.d.i of this Fact Sheet.

### **3. Final Effluent Limitations**

#### **a. Final Effluent Limitations – Applicable to All Low Threat Discharges**

- i. **pH.** The hydrogen ion (pH) of the treated effluent shall be maintained within the limits of 6.0 to 9.0 standard units.



**b. Final Effluent Limitations – Applicable to Discharges from Water System-Related Activities and Other Low Threat Discharge Activities**

- i. **Chlorine, Total Residual.** The effluent limitations in Table F-3 may be applied to low threat wastewaters discharged to surface waters from water system-related activities and other low threat discharge activities in the Colorado River Basin Region. The effluent limitations applicable to a given Discharger will be specified in the NOA from the Executive Officer.

**Table F-3. Summary of Final Effluent Limitations for Total Residual Chlorine**

| Parameter                | Units | 1-Hour Average | 4-Day Average | Basis <sup>1</sup> |
|--------------------------|-------|----------------|---------------|--------------------|
| Chlorine, Total Residual | mg/L  | 0.019          | 0.011         | BP, NAWQC          |

<sup>1</sup> BP = Basin Plan

<sup>2</sup> NAWQC = National Ambient Water Quality Criteria for the protection of freshwater aquatic life

**c. Final Effluent Limitations – Applicable to Hydrostatic Test Water Discharges**

- i. **TSS, BOD, Oil and Grease, Turbidity, Settleable Solids, TPH and TRC.** The effluent limitations in Table F-4 may be applied to low threat wastewater discharged to surface waters from hydrostatic test water discharges in the Colorado River Basin Region. The effluent limitations applicable to a given Discharger will be specified in the NOA from the Executive Officer.

**Table F-4. Summary of Final Effluent Limitations for Hydrostatic Test Water Activities**

| Parameter  | Units | Effluent Limitations                                   |
|--|-------|--|
| Suspended Solids, Total                                  | mg/L  | 95   |
| BOD <sub>5</sub> @ 20° C or<br>CBOD <sub>5</sub> @ 20° C | mg/L  | 55 for BOD <sub>5</sub> or<br>50 for CBOD <sub>5</sub> |
| Oil and Grease   | mg/L  | 25   |
| Turbidity  | NTU   | 75   |
| Settleable Solids  | ml/L  | 0.2  |
| Total Petroleum Hydrocarbons                             | mg/L  | 0.1  |
| Chlorine Total Residual                                  | mg/L  | See Table F-3  |

**d. Final Effluent Limitations – Applicable to Discharges to Specific Waterbodies**

- i. **Discharges to Waters Designated as REC-I.** In addition to the effluent limitations identified in section IV.D.3.a through c above, Dischargers that discharge to waterbodies designated as REC-I that exceed the screening level for E. coli contained in Table B-8 of Attachment B shall be subject to the following effluent limitations. The effluent limitations applicable to a given Discharger will be specified in the NOA from the Executive Officer.

- (a) **E. coli.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed

a MPN of 126/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 400/100 mL.

- ii. **Discharges to Waters Designated as REC-II.** In addition to the effluent limitations identified in section IV.D.3.a through c above, Dischargers that discharge to waterbodies designated as REC-II that exceed the screening level for E. coli contained in Table B-9 of Attachment B shall be subject to the following effluent limitations. The effluent limitations applicable to a given Discharger will be specified in the NOA from the Executive Officer.

(a) **E. coli.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 630/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 2,000/100 mL.

- iii. **Discharges to Segments of the Colorado River Designated as REC-I.** In addition to the effluent limitations identified in section IV.D.3.a through c above, Dischargers that discharge to segments of the Colorado River designated as REC-I that exceed the screening level for E. coli contained in Table B-8 of Attachment B shall be subject to the following effluent limitations. The effluent limitations applicable to a given Discharger will be specified in the NOA from the Executive Officer.

(a) **E. coli.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed 126 MPN/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 235/100 mL.

- iv. **Discharges to Segments of the Colorado River Designated as REC-II.** In addition to the effluent limitations identified in section IV.D.3.a through c above, Dischargers that discharge to segments of the Colorado River designated as REC-II that exceed the screening level for E. coli contained in Table B-9 of Attachment B shall be subject to the following effluent limitations. The effluent limitations applicable to a given Discharger will be specified in the NOA from the Executive Officer.

(a) **E. coli.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 630/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 1,175/100 mL.

- v. **Discharges to the New River.** In addition to the effluent limitations identified in section IV.D.3.a through c above, Dischargers that discharge to the New River that exceed a screening level(s) for E. coli, enterococci, fecal coliform organisms, or TSS contained in Table B-10 of Attachment B shall be subject to the following

effluent limitations. The effluent limitations applicable to a given Discharger will be specified in the NOA from the Executive Officer.

**(a) Pathogens**

- (1) E. Coli.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 126/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 400/100 mL.
- (2) Enterococci.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 33/100 mL, nor shall any sample exceed the maximum allowable bacterial density of a MPN of 100/100 mL.
- (3) Fecal Coliform.** The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a MPN of 200/100 mL, nor shall more than ten percent of the total samples during any 30-day period exceed a MPN of 400/100 mL.

**(b) Total Suspended Solids.** The annual average effluent concentration of total suspended solids in the effluent shall not exceed 200 mg/L<sup>8</sup>.

- 4. Satisfaction of Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and the federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some exceptions.

Discharges of hydrostatic test water that were previously authorized under Regional Board General Order No. 98-300, which was rescinded on March 19, 2009, may be authorized to discharge under this General Board Order. General Board Order No. 98-300 established effluent limitations for TSS, BOD<sub>5</sub>, oil and grease, turbidity, settleable solids, and total residual chlorine. Effluent limitations for these parameters have been retained in this General Board Order. The discharges authorized by this General Board Order are low threat, high quality wastewaters and are not expected to negatively impact receiving water quality. This General Board Order requires Dischargers to analyze the discharge for conventional, non-conventional, and priority pollutants and submit the results with the NOI. If, based on sampling results, the Regional Water Board finds that concentrations of any of these parameters threaten to negatively impact receiving water quality, then authorization for coverage under this General Board Order will be denied and coverage under an individual permit will be required. This General Board Order also requires Discharger's to develop and implement a BMP or Control Strategy Plan to control or abate the discharge of pollutants. The requirements of this General Board Order are protective of all water quality objectives.

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<sup>8</sup> The TSS effluent limitation of 95 mg/L for TSS from hydrostatic test water discharges is more stringent and shall be in effect.

## **5. Satisfaction of Antidegradation Policy**

The federal regulations at 40 CFR 131.12 require that the state water quality standards include an anti-degradation policy consistent with federal policy. The State Water Board established California's anti-degradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal anti-degradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal anti-degradation policies. The permitted discharge is consistent with the anti-degradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16. The Regional Water Board expects impacts to water quality to be insignificant based on the discharge types authorized under this General Permit. This General Board Order requires all Dischargers to screen for the presence of commonly-occurring conventional and non-conventional pollutants and for toxic priority pollutants as required by the SIP, , except for those dischargers approved for a categorical exception authorized by section 5.3 of the SIP. Based the results of these analyses, the Regional Water Board will determine coverage under this General Board Order, and establish effluent limitations, if applicable, on a Discharger-specific basis. This General Board Order also requires Dischargers to have in place a BMP Plan with specified components. Those Dischargers that exceed one or more screening levels for conventional and/or non-conventional pollutants in Attachment B are further required to summarize their ability to comply with effluent limitations for those parameters in the NOI. Those Dischargers that exceed one or more screening levels for priority pollutants in Attachment B will not be enrolled under this General Board Order, but will need to apply for an individual permit.

### **E. Interim Effluent Limitations – Not Applicable**

### **F. Land Discharge Specifications – Not Applicable**

### **G. Reclamation Specifications – Not Applicable**

## **V. RATIONALE FOR RECEIVING WATER LIMITATIONS**

### **A. Surface Water Limitations – Applicable to All Low Threat Discharges**

Receiving water limitations are based on the water quality objectives contained in the Basin Plan and are a required part of this General Board Order. All low threat discharges to any receiving water of the Colorado River Basin Region shall not:

1. Result in the concentration of dissolved oxygen in the receiving water to fall below 5.0 mg/L. When dissolved oxygen in the receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.
2. Result in the presence of oil, grease, floating material (liquids, solids, foam, and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.

3. Result in the deposition of pesticides or combination of pesticides detectable in concentrations that adversely affects beneficial uses.
4. Result in discoloration in the receiving water that adversely affects beneficial uses.
5. Result in the discharge of biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
6. Result in an increase of turbidity that adversely affects beneficial uses.
7. Result in the normal ambient pH of the receiving water to fall below 6.0 or exceed 9.0 standard units.
8. Result in altering the natural receiving water temperature that adversely affects beneficial uses.
9. Result in the deposition of material that causes nuisance or adversely affects beneficial uses.
10. Result in the discharge of an individual chemical or combination of chemicals in concentrations that adversely affect beneficial uses.
11. Result in toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
12. Result in an increase in taste or odor-producing substances that adversely affect beneficial uses.
13. Result in the violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board as required by the federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA section 303 or amendments thereto, the Regional Water Board will revise and modify this General Board Order in accordance with the stricter standards.

#### **B. Surface Water Limitations – Applicable to Discharges to Specific Waterbodies**

Receiving water limitations to specific waterbodies are based upon the water quality objectives contained in the Basin Plan and are a required part of this General Board Order. The waterbody-specific limitations are summarized below:

1. Discharges to the New River, Alamo River, and the Imperial Valley Drains shall not exceed an annual average of 4,000 mg/L and a daily maximum of 4,500 mg/L of TDS.
2. Discharges to the Coachella Valley and the Palo Verde Valley Drains shall not exceed an annual average of 2,000 mg/L and a daily maximum of 2,500 mg/L of TDS.

### **C. Groundwater Limitations – Not Applicable**

## **VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

Section 122.48 of Title 40 of the CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this General Board Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

### **A. Influent Monitoring – Not Applicable**

### **B. Effluent Monitoring**

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP. This provision requires compliance with the Monitoring and Reporting Program, and is based on Sections 122.44(i), 122.62, 122.63 and 124.5. The MRP is a standard requirement in almost all NPDES permits (including the proposed General Board Order) issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the CWC, and Regional Water Board's policies. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements.

The effluent monitoring requirements have been established as follows:

1. General Board Order No. 98-300 for discharges of hydrostatic test water required monitoring once per discharge event for TSS, BOD<sub>5</sub>, oil and grease, turbidity, settleable solids and total residual chlorine. General Board Order No. 98-300 also required daily monitoring for temperature and dissolved oxygen. The monitoring requirements have been carried forward in this permit, monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted. The Executive Officer shall specify the monitoring frequency for these parameters in the NOA.
2. This General Board Order requires monitoring once per discharge for flow, fecal coliform organisms, pH, TSS, turbidity, settleable solids, enterococci, E. coli, Oil and Grease, TPH and TDS to characterize the effluent and determine compliance with effluent limitations, if applicable. Monitoring for priority pollutants is required yearly, except for those dischargers approved for a categorical exception authorized by section 5.3 of the SIP. Monitoring for flow and pH shall be performed daily. Since discharges from direct water releases do not exceed the water quality goals, discharges from potable water releases that do not exceed screening criteria do not need to monitor for constituents as listed in the Monitoring and Reporting Program. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes

a request and the request is backed by statistical trends of monitoring data submitted. The Executive Officer shall specify the monitoring frequency for these parameters in the NOA.

3. For discharges that exceed the screening level for total residual chlorine contained in Attachment B, the monitoring frequency will be once per discharge. As discussed in section IV.C.3.d.i of this Fact Sheet, the Regional Water Board acknowledges the complications of achieving relatively low reporting levels in field locations. This General Board Order allows Dischargers to use handheld monitoring devices to monitor total residual chlorine in the effluent. This General Board Order also requires dischargers to utilize a method capable of achieving a reporting level of 0.08 mg/L until the State Water Board adopts a state-wide policy with a specified reporting level achievable in the field and laboratory. The reporting level of 0.08 mg/L represents a level that hand-held field meters are capable of achieving. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted. The Executive Officer shall specify the monitoring frequency for these parameters in the NOA

## **C. Whole Effluent Toxicity Testing Requirements**

The discharges authorized by this General Board Order have a low threat to water quality. They are low volume and/or short-term in nature and are not expected to contribute to acute or chronic toxicity; therefore, effluent limitations for acute and chronic toxicity and requirements for acute and chronic WET testing are not required by this General Board Order.

## **D. Receiving Water Monitoring**

### **1. Surface Water**

Surface water monitoring once per discharge is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water pursuant to the Basin Plan. Upstream and downstream receiving water monitoring frequencies for dissolved oxygen, TDS, pH, and temperature, shall be specified in the NOA from the Executive Officer. Since discharges from direct water releases do not exceed the water quality goals, discharges from potable water releases that do not exceed screening criteria do not need to monitor for these constituents. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

### **2. Groundwater – Not Applicable**

## **E. Other Monitoring Requirements**

1. **Annual Report.** Dischargers enrolled under this General Board Order are required to submit an annual report including current contact information and the status of updates to the Discharger's BMP or Control Strategy Plan. Dischargers having multiple

discharges of the same type, rate, and duration, and into the same receiving water must report on the number, frequency, rate, types of discharges, and date/time of actual discharges in the annual report.

## VII. RATIONALE FOR PROVISIONS

### A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Sections 122.41(a)(1) and (b) through (n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the General Board Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this General Board Order omits federal conditions that address enforcement authority specified in sections 40 CFR 122.41(j)(5) and (k)(2) because the enforcement authority under the CWC is more stringent. In lieu of these conditions, this General Board Order incorporates by reference CWC section 13387(e).

### B. Special Provisions

#### 1. Reopener Provisions

- a. **General.** Pursuant to 40 CFR Part 123, the Regional Water Board may reopen this General Board Order to modify conditions and requirements due to the promulgation of new regulations or the adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.
- b. **Total Residual Chlorine.** The State Water Board has developed the Draft Policy on Total Residual Chlorine and Chlorine-Produced Oxidants (TRC/CPO Draft Policy), which, when adopted, is intended to establish consistent standards and implementation procedures for regulating chlorine statewide. This provision allows the Regional Water Board to reopen this General Board Order to include a revised reporting level for determining compliance with effluent limitations for total residual chlorine if a statewide policy for such is adopted during the term of this General Board Order.

#### 2. Special Studies and Additional Monitoring Requirements – Not Applicable

#### 3. Best Management Practices or Control Strategies

- a. **BMP or Control Strategy Plan.** Because of the expected diversity of low threat discharges covered by this General Board Order, specific technology-based effluent



limitations for the universe of compounds that could be found in wastewater have not been established. As allowed under 40 CFR 122.44(k), BMPs or control strategies will serve in lieu of technology-based effluent limitations, in order to carry out the purposes and intent of the CWA. Each Discharger authorized under the General Board Order is required to develop and implement a BMP or Control Strategy Plan to control or abate the discharge of pollutants. The Discharger shall develop a BMP Plan if the Discharger does not already have one in place. The BMP Plan shall be consistent with the general guidance contained in the USEPA *Guidance Manual for Developing Best Management Practices* (BMPs) (EPA 833-B-93-004). The Discharger may consult other handbooks for guidance, such as the California Stormwater Best Management Practice Handbooks developed by the California Stormwater Quality Association, available at <http://www.cabmphandbooks.org/>, to address the site-specific discharge situation. Dischargers exceeding the applicable screening levels for total residual chlorine, pathogens, and/or TSS contained in Attachment B are required to submit the BMP or Control Strategy Plan with the NOI.

**4. Construction, Operation, and Maintenance Specifications – Not Applicable**

**5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable**

**6. Other Special Provisions – Not Applicable**

**7. Required Submittals and Reports**

This section specifies the deliverables and due dates for the annual report.

**VIII. PUBLIC PARTICIPATION**

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for the discharge of low threat wastewaters to surface water. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

**A. Notification of Interested Parties**

The Regional Water Board has notified potential Dischargers and interested agencies and persons of its intent to prescribe WDRs for low threat discharges to surface waters and has provided interested parties an opportunity to submit written comments and recommendations. Notification was provided to interested parties through the *Imperial Valley Press*, *Palo Verde Valley Times*, *Press Enterprise* and *Desert Sun* newspapers.

**B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this General Board Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board office by 5:00 p.m. on October 15, 2009

### **C. Public Hearing**

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: November 19, 2009  
Time: 10:00 AM  
Location: City of Palm Desert  
City Council Chambers  
73-510 Fred Waring Drive  
Palm Desert, CA 92260

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to low threat discharges, WDRs, and NPDES permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be submitted in writing.

Please be aware that dates and venues may change. The Regional Water Board's Web address is <http://www.waterboards.ca.gov/coloradoriver>, where you may access the Regional Water Board's current agenda and determine if changes in hearing dates and locations have been made.

### **D. Waste Discharge Requirements Petitions**

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and the California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this General Board Order, except that if the thirtieth day following the date of this General Board Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or will be provided upon request.

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

### **E. Information and Copying**

Related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the Regional Water Board office at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (760) 346-7491.

### **F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding this general WDRs and NPDES permit should contact the Regional Water Board, reference the general WDRs and NPDES permit, and provide a name, address, and phone number.

### **G. Additional Information**

Requests for additional information or questions regarding this General Board Order should be directed to John Carmona at (760) 340-4521.

## ATTACHMENT G – LIST OF PRIORITY POLLUTANTS

**Table G-1 List of Priority Pollutants**

| CTR Number | Parameter                  | CAS Number | Suggested Analytical Methods |
|------------|----------------------------|------------|------------------------------|
| 1          | Antimony                   | 7440360    | EPA 6020/200.8               |
| 2          | Arsenic                    | 7440382    | EPA 1632                     |
| 3          | Beryllium                  | 7440417    | EPA 6020/200.8               |
| 4          | Cadmium                    | 7440439    | EPA 1638/200.8               |
| 5a         | Chromium (III)             | 16065831   | EPA 6020/200.8               |
| 5a         | Chromium (VI)              | 18540299   | EPA 7199/1636                |
| 6          | Copper                     | 7440508    | EPA 6020/200.8               |
| 7          | Lead                       | 7439921    | EPA 1638                     |
| 8          | Mercury                    | 7439976    | EPA 1669/1631                |
| 9          | Nickel                     | 7440020    | EPA 6020/200.8               |
| 10         | Selenium                   | 7782492    | EPA 6020/200.8               |
| 11         | Silver                     | 7440224    | EPA 6020/200.8               |
| 12         | Thallium                   | 7440280    | EPA 6020/200.8               |
| 13         | Zinc                       | 7440666    | EPA 6020/200.8               |
| 14         | Cyanide                    | 57125      | EPA 9012A                    |
| 15         | Asbestos                   | 1332214    | EPA/600/R<br>93/116(PCM)     |
| 16         | 2,3,7,8-TCDD               | 1746016    | EPA 8290 (HRGC) MS           |
| 17         | Acrolein                   | 107028     | EPA 8260B                    |
| 18         | Acrylonitrile              | 107131     | EPA 8260B                    |
| 19         | Benzene                    | 71432      | EPA 8260B                    |
| 20         | Bromoform                  | 75252      | EPA 8260B                    |
| 21         | Carbon Tetrachloride       | 56235      | EPA 8260B                    |
| 22         | Chlorobenzene              | 108907     | EPA 8260B                    |
| 23         | Chlorodibromomethane       | 124481     | EPA 8260B                    |
| 24         | Chloroethane               | 75003      | EPA 8260B                    |
| 25         | 2-Chloroethylvinyl Ether   | 110758     | EPA 8260B                    |
| 26         | Chloroform                 | 67663      | EPA 8260B                    |
| 27         | Dichlorobromomethane       | 75274      | EPA 8260B                    |
| 28         | 1,1-Dichloroethane         | 75343      | EPA 8260B                    |
| 29         | 1,2-Dichloroethane         | 107062     | EPA 8260B                    |
| 30         | 1,1-Dichloroethylene       | 75354      | EPA 8260B                    |
| 31         | 1,2-Dichloropropane        | 78875      | EPA 8260B                    |
| 32         | 1,3-Dichloropropylene      | 542756     | EPA 8260B                    |
| 33         | Ethylbenzene               | 100414     | EPA 8260B                    |
| 34         | Methyl Bromide             | 74839      | EPA 8260B                    |
| 35         | Methyl Chloride            | 74873      | EPA 8260B                    |
| 36         | Methylene Chloride         | 75092      | EPA 8260B                    |
| 37         | 1,1,2,2-Tetrachloroethane  | 79345      | EPA 8260B                    |
| 38         | Tetrachloroethylene        | 127184     | EPA 8260B                    |
| 39         | Toluene                    | 108883     | EPA 8260B                    |
| 40         | 1,2-Trans-Dichloroethylene | 156605     | EPA 8260B                    |

| CTR Number | Parameter                   | CAS Number | Suggested Analytical Methods |
|------------|-----------------------------|------------|------------------------------|
| 41         | 1,1,1-Trichloroethane       | 71556      | EPA 8260B                    |
| 42         | 1,1,2-Trichloroethane       | 79005      | EPA 8260B                    |
| 43         | Trichloroethylene           | 79016      | EPA 8260B                    |
| 44         | Vinyl Chloride              | 75014      | EPA 8260B                    |
| 45         | 2-Chlorophenol              | 95578      | EPA 8270C                    |
| 46         | 2,4-Dichlorophenol          | 120832     | EPA 8270C                    |
| 47         | 2,4-Dimethylphenol          | 105679     | EPA 8270C                    |
| 48         | 2-Methyl-4,6-Dinitrophenol  | 534521     | EPA 8270C                    |
| 49         | 2,4-Dinitrophenol           | 51285      | EPA 8270C                    |
| 50         | 2-Nitrophenol               | 88755      | EPA 8270C                    |
| 51         | 4-Nitrophenol               | 100027     | EPA 8270C                    |
| 52         | 3-Methyl-4-Chlorophenol     | 59507      | EPA 8270C                    |
| 53         | Pentachlorophenol           | 87865      | EPA 8270C                    |
| 54         | Phenol                      | 108952     | EPA 8270C                    |
| 55         | 2,4,6-Trichlorophenol       | 88062      | EPA 8270C                    |
| 56         | Acenaphthene                | 83329      | EPA 8270C                    |
| 57         | Acenaphthylene              | 208968     | EPA 8270C                    |
| 58         | Anthracene                  | 120127     | EPA 8270C                    |
| 59         | Benzidine                   | 92875      | EPA 8270C                    |
| 60         | Benzo(a)Anthracene          | 56553      | EPA 8270C                    |
| 61         | Benzo(a)Pyrene              | 50328      | EPA 8270C                    |
| 62         | Benzo(b)Fluoranthene        | 205992     | EPA 8270C                    |
| 63         | Benzo(ghi)Perylene          | 191242     | EPA 8270C                    |
| 64         | Benzo(k)Fluoranthene        | 207089     | EPA 8270C                    |
| 65         | Bis(2-Chloroethoxy)Methane  | 111911     | EPA 8270C                    |
| 66         | Bis(2-Chloroethyl)Ether     | 111444     | EPA 8270C                    |
| 67         | Bis(2-Chloroisopropyl)Ether | 108601     | EPA 8270C                    |
| 68         | Bis(2-Ethylhexyl)Phthalate  | 117817     | EPA 8270C                    |
| 69         | 4-Bromophenyl Phenyl Ether  | 101553     | EPA 8270C                    |
| 70         | Butylbenzyl Phthalate       | 85687      | EPA 8270C                    |
| 71         | 2-Chloronaphthalene         | 91587      | EPA 8270C                    |
| 72         | 4-Chlorophenyl Phenyl Ether | 7005723    | EPA 8270C                    |
| 73         | Chrysene                    | 218019     | EPA 8270C                    |
| 74         | Dibenzo(a,h)Anthracene      | 53703      | EPA 8270C                    |
| 75         | 1,2-Dichlorobenzene         | 95501      | EPA 8260B                    |
| 76         | 1,3-Dichlorobenzene         | 541731     | EPA 8260B                    |
| 77         | 1,4-Dichlorobenzene         | 106467     | EPA 8260B                    |
| 78         | 3,3'-Dichlorobenzidine      | 91941      | EPA 8270C                    |
| 79         | Diethyl Phthalate           | 84662      | EPA 8270C                    |
| 80         | Dimethyl Phthalate          | 131113     | EPA 8270C                    |
| 81         | Di-n-Butyl Phthalate        | 84742      | EPA 8270C                    |
| 82         | 2,4-Dinitrotoluene          | 121142     | EPA 8270C                    |
| 83         | 2,6-Dinitrotoluene          | 606202     | EPA 8270C                    |
| 84         | Di-n-Octyl Phthalate        | 117840     | EPA 8270C                    |
| 85         | 1,2-Diphenylhydrazine       | 122667     | EPA 8270C                    |
| 86         | Fluoranthene                | 206440     | EPA 8270C                    |

| CTR Number | Parameter                 | CAS Number | Suggested Analytical Methods |
|------------|---------------------------|------------|------------------------------|
| 87         | Fluorene                  | 86737      | EPA 8270C                    |
| 88         | Hexachlorobenzene         | 118741     | EPA 8260B                    |
| 89         | Hexachlorobutadiene       | 87863      | EPA 8260B                    |
| 90         | Hexachlorocyclopentadiene | 77474      | EPA 8270C                    |
| 91         | Hexachloroethane          | 67721      | EPA 8260B                    |
| 92         | Indeno(1,2,3-cd)Pyrene    | 193395     | EPA 8270C                    |
| 93         | Isophorone                | 78591      | EPA 8270C                    |
| 94         | Naphthalene               | 91203      | EPA 8260B                    |
| 95         | Nitrobenzene              | 98953      | EPA 8270C                    |
| 96         | N-Nitrosodimethylamine    | 62759      | EPA 8270C                    |
| 97         | N-Nitrosodi-n-Propylamine | 621647     | EPA 8270C                    |
| 98         | N-Nitrosodiphenylamine    | 86306      | EPA 8270C                    |
| 99         | Phenanthrene              | 85018      | EPA 8270C                    |
| 100        | Pyrene                    | 129000     | EPA 8270C                    |
| 101        | 1,2,4-Trichlorobenzene    | 120821     | EPA 8260B                    |
| 102        | Aldrin                    | 309002     | EPA 8081A                    |
| 103        | alpha-BHC                 | 319846     | EPA 8081A                    |
| 104        | beta-BHC                  | 319857     | EPA 8081A                    |
| 105        | gamma-BHC                 | 58899      | EPA 8081A                    |
| 106        | delta-BHC                 | 319868     | EPA 8081A                    |
| 107        | Chlordane                 | 57749      | EPA 8081A                    |
| 108        | 4,4'-DDT                  | 50293      | EPA 8081A                    |
| 109        | 4,4'-DDE                  | 72559      | EPA 8081A                    |
| 110        | 4,4'-DDD                  | 72548      | EPA 8081A                    |
| 111        | Dieldrin                  | 60571      | EPA 8081A                    |
| 112        | alpha-Endosulfan          | 959988     | EPA 8081A                    |
| 113        | beta-Endosulfan           | 33213659   | EPA 8081A                    |
| 114        | Endosulfan Sulfate        | 1031078    | EPA 8081A                    |
| 115        | Endrin                    | 72208      | EPA 8081A                    |
| 116        | Endrin Aldehyde           | 7421934    | EPA 8081A                    |
| 117        | Heptachlor                | 76448      | EPA 8081A                    |
| 118        | Heptachlor Epoxide        | 1024573    | EPA 8081A                    |
| 119        | PCB-1016                  | 12674112   | EPA 8082                     |
| 120        | PCB-1221                  | 11104282   | EPA 8082                     |
| 121        | PCB-1232                  | 11141165   | EPA 8082                     |
| 122        | PCB-1242                  | 53469219   | EPA 8082                     |
| 123        | PCB-1248                  | 12672296   | EPA 8082                     |
| 124        | PCB-1254                  | 11097691   | EPA 8082                     |
| 125        | PCB-1260                  | 11096825   | EPA 8082                     |
| 126        | Toxaphene                 | 8001352    | EPA 8081A                    |

## ATTACHMENT H – STATE WATER BOARD MINIMUM LEVELS

The State Water Board Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the State Water Board and become effective. The following tables (Tables H-1 through H-4) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs. The MLs in this appendix are in parts per billion (µg/L).

**Table H-1. Volatile Substances**

| <b>Table 2a - VOLATILE SUBSTANCES*</b> | <b>GC</b> | <b>GCMS</b> |
|--|-----------|-------------|
| 1,1 Dichloroethane                     | 0.5       | 1           |
| 1,1 Dichloroethylene                   | 0.5       | 2           |
| 1,1,1 Trichloroethane                  | 0.5       | 2           |
| 1,1,2 Trichloroethane                  | 0.5       | 2           |
| 1,1,2,2 Tetrachloroethane              | 0.5       | 1           |
| 1,2 Dichlorobenzene (volatile)         | 0.5       | 2           |
| 1,2 Dichloroethane                     | 0.5       | 2           |
| 1,2 Dichloropropane                    | 0.5       | 1           |
| 1,3 Dichlorobenzene (volatile)         | 0.5       | 2           |
| 1,3 Dichloropropene (volatile)         | 0.5       | 2           |
| 1,4 Dichlorobenzene (volatile)         | 0.5       | 2           |
| Acrolein                               | 2.0       | 5           |
| Acrylonitrile                          | 2.0       | 2           |
| Benzene                                | 0.5       | 2           |
| Bromoform                              | 0.5       | 2           |
| Methyl Bromide                         | 1.0       | 2           |
| Carbon Tetrachloride                   | 0.5       | 2           |
| Chlorobenzene                          | 0.5       | 2           |
| Chlorodibromomethane                   | 0.5       | 2           |
| Chloroethane                           | 0.5       | 2           |
| Chloroform                             | 0.5       | 2           |
| Chloromethane                          | 0.5       | 2           |
| Dichlorobromomethane                   | 0.5       | 2           |
| Dichloromethane                        | 0.5       | 2           |
| Ethylbenzene                           | 0.5       | 2           |
| Tetrachloroethylene                    | 0.5       | 2           |
| Toluene                                | 0.5       | 2           |
| Trans-1,2 Dichloroethylene             | 0.5       | 1           |
| Trichloroethene                        | 0.5       | 2           |
| Vinyl Chloride                         | 0.5       | 2           |

\*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

**Table H-2. Semi-Volatile Substances**

| <b>Table 2b - SEMI-VOLATILE SUBSTANCES*</b> | <b>GC</b> | <b>GCMS</b> | <b>LC</b> | <b>COLOR</b> |
|---|-----------|-------------|-----------|--------------|
| Benzo (a) Anthracene                        | 10        | 5           |           |              |
| 1,2 Dichlorobenzene (semivolatile)          | 2         | 2           |           |              |
| 1,2 Diphenylhydrazine                       |           | 1           |           |              |
| 1,2,4 Trichlorobenzene                      | 1         | 5           |           |              |
| 1,3 Dichlorobenzene (semivolatile)          | 2         | 1           |           |              |
| 1,4 Dichlorobenzene (semivolatile)          | 2         | 1           |           |              |
| 2 Chlorophenol                              | 2         | 5           |           |              |
| 2,4 Dichlorophenol                          | 1         | 5           |           |              |
| 2,4 Dimethylphenol                          | 1         | 2           |           |              |
| 2,4 Dinitrophenol                           | 5         | 5           |           |              |
| 2,4 Dinitrotoluene                          | 10        | 5           |           |              |
| 2,4,6 Trichlorophenol                       | 10        | 10          |           |              |
| 2,6 Dinitrotoluene                          |           | 5           |           |              |
| 2- Nitrophenol                              |           | 10          |           |              |
| 2-Chloroethyl vinyl ether                   | 1         | 1           |           |              |
| 2-Chloronaphthalene                         |           | 10          |           |              |
| 3,3' Dichlorobenzidine                      |           | 5           |           |              |
| Benzo (b) Fluoranthene                      |           | 10          | 10        |              |
| 3-Methyl-Chlorophenol                       | 5         | 1           |           |              |
| 4,6 Dinitro-2-methylphenol                  | 10        | 5           |           |              |
| 4- Nitrophenol                              | 5         | 10          |           |              |
| 4-Bromophenyl phenyl ether                  | 10        | 5           |           |              |
| 4-Chlorophenyl phenyl ether                 |           | 5           |           |              |
| Acenaphthene                                | 1         | 1           | 0.5       |              |
| Acenaphthylene                              |           | 10          | 0.2       |              |
| Anthracene                                  |           | 10          | 2         |              |
| Benzidine                                   |           | 5           |           |              |
| Benzo(a) pyrene                             |           | 10          | 2         |              |
| Benzo(g,h,i)perylene                        |           | 5           | 0.1       |              |
| Benzo(k)fluoranthene                        |           | 10          | 2         |              |
| bis 2-(1-Chloroethoxyl) methane             |           | 5           |           |              |
| bis(2-chloroethyl) ether                    | 10        | 1           |           |              |
| bis(2-Chloroisopropyl) ether                | 10        | 2           |           |              |
| bis(2-Ethylhexyl) phthalate                 | 10        | 5           |           |              |
| Butyl benzyl phthalate                      | 10        | 10          |           |              |
| Chrysene                                    |           | 10          | 5         |              |
| di-n-Butyl phthalate                        |           | 10          |           |              |
| di-n-Octyl phthalate                        |           | 10          |           |              |
| Dibenzo(a,h)-anthracene                     |           | 10          | 0.1       |              |
| Diethyl phthalate                           | 10        | 2           |           |              |
| Dimethyl phthalate                          | 10        | 2           |           |              |
| Fluoranthene                                | 10        | 1           | 0.05      |              |
| Fluorene                                    |           | 10          | 0.1       |              |
| Hexachloro-cyclopentadiene                  | 5         | 5           |           |              |
| Hexachlorobenzene                           | 5         | 1           |           |              |



| <b>Table 2b - SEMI-VOLATILE SUBSTANCES*</b> | <b>GC</b> | <b>GCMS</b> | <b>LC</b> | <b>COLOR</b> |
|---|-----------|-------------|-----------|--------------|
| Hexachlorobutadiene                         | 5         | 1           |           |              |
| Hexachloroethane                            | 5         | 1           |           |              |
| Indeno(1,2,3,cd)-pyrene                     |           | 10          | 0.05      |              |
| Isophorone                                  | 10        | 1           |           |              |
| N-Nitroso diphenyl amine                    | 10        | 1           |           |              |
| N-Nitroso-dimethyl amine                    | 10        | 5           |           |              |
| N-Nitroso -di n-propyl amine                | 10        | 5           |           |              |
| Naphthalene                                 | 10        | 1           | 0.2       |              |
| Nitrobenzene                                | 10        | 1           |           |              |
| Pentachlorophenol                           | 1         | 5           |           |              |
| Phenanthrene                                |           | 5           | 0.05      |              |
| Phenol **                                   | 1         | 1           |           | 50           |
| Pyrene                                      |           | 10          | 0.05      |              |

\*With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

\*\*Phenol by colorimetric technique has a factor of 1.

**Table H-3. Inorganics**

| <b>Table 2c – INORGANICS*</b> | <b>FAA</b> | <b>GFAA</b> | <b>ICP</b> | <b>ICPMS</b> | <b>SPGFAA</b> | <b>HYDRIDE</b> | <b>CVAA</b> | <b>COLOR</b> | <b>DCP</b> |
|-------------------------------|------------|-------------|------------|--------------|---------------|----------------|-------------|--------------|------------|
| Antimony                      | 10         | 5           | 50         | 0.5          | 5             | 0.5            |             |              | 1,000      |
| Arsenic                       |            | 2           | 10         | 2            | 2             | 1              |             | 20           | 1,000      |
| Beryllium                     | 20         | 0.5         | 2          | 0.5          | 1             |                |             |              | 1,000      |
| Cadmium                       | 10         | 0.5         | 10         | 0.25         | 0.5           |                |             |              | 1,000      |
| Chromium (total)              | 50         | 2           | 10         | 0.5          | 1             |                |             |              | 1,000      |
| Chromium VI                   | 5          |             |            |              |               |                |             | 10           |            |
| Copper                        | 25         | 5           | 10         | 0.5          | 2             |                |             |              | 1,000      |
| Cyanide                       |            |             |            |              |               |                |             | 5            |            |
| Lead                          | 20         | 5           | 5          | 0.5          | 2             |                |             |              | 10,000     |
| Mercury                       |            |             |            | 0.5          |               |                | 0.2         |              |            |
| Nickel                        | 50         | 5           | 20         | 1            | 5             |                |             |              | 1,000      |
| Selenium                      |            | 5           | 10         | 2            | 5             | 1              |             |              | 1,000      |
| Silver                        | 10         | 1           | 10         | 0.25         | 2             |                |             |              | 1,000      |
| Thallium                      | 10         | 2           | 10         | 1            | 5             |                |             |              | 1,000      |
| Zinc                          | 20         |             | 20         | 1            | 10            |                |             |              | 1,000      |

\*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

**Table H-4. Pesticides and PCBs**

| <b>Table 2d – PESTICIDES – PCBs*</b> | <b>GC</b> |
|--------------------------------------|-----------|
| 4,4'-DDD                             | 0.05      |
| 4,4'-DDE                             | 0.05      |
| 4,4'-DDT                             | 0.01      |
| a-Endosulfan                         | 0.02      |
| alpha-BHC                            | 0.01      |
| Aldrin                               | 0.005     |
| b-Endosulfan                         | 0.01      |
| Beta-BHC                             | 0.005     |
| Chlordane                            | 0.1       |
| Delta-BHC                            | 0.005     |
| Dieldrin                             | 0.01      |
| Endosulfan Sulfate                   | 0.05      |
| Endrin                               | 0.01      |
| Endrin Aldehyde                      | 0.01      |
| Heptachlor                           | 0.01      |
| Heptachlor Epoxide                   | 0.01      |
| Gamma-BHC (Lindane)                  | 0.02      |
| PCB 1016                             | 0.5       |
| PCB 1221                             | 0.5       |
| PCB 1232                             | 0.5       |
| PCB 1242                             | 0.5       |
| PCB 1248                             | 0.5       |
| PCB 1254                             | 0.5       |
| PCB 1260                             | 0.5       |
| Toxaphene                            | 0.5       |

\*The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

### **Techniques:**

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR – Colorimetric

## ATTACHMENT I – NOTICE OF TERMINATION

### NOTICE OF TERMINATION OF COVERAGE UNDER THE GENERAL PERMIT FOR DISCHARGES OF LOW THREAT WASTEWATERS TO SURFACE WATER

**ORDER NO. R7-2009-0300**  
**NPDES NO. CAG997001**

Submission of this Notice of Termination (NOT) constitutes notice that the owner / operator of the facility / project identified on this form is no longer authorized to discharge low threat wastewater to surface water by Order No. R7-2009-0300, National Pollutant Discharge Elimination System (NPDES) Permit No. CAG997001.

#### I. WDID Number

Enter your WDID No. in the space provided:

#### II. OWNER / OPERATOR INFORMATION

|                |        |                 |       |
|----------------|--------|-----------------|-------|
| Name           |        | Mailing Address |       |
| City           | County | State           | Zip   |
| Contact Person | Title  |                 | Phone |

#### III. BASIS FOR TERMINATION

**A.** Indicate the reason for termination of the discharge below. Provide additional explanation under item III.B below.

☐ All discharges previously authorized by this General Board Order have ceased. Project has been completed.

☐ All discharges previously authorized by this General Board Order have been redirected to (*check one*):

☐ Effluent water is retained on site.

☐ Effluent water is discharged to a municipal sanitary sewer system.

☐ Effluent water is discharged to evaporation ponds or percolation ponds offsite.

☐ Effluent water is reused/reclaimed.

☐ Other (please describe)

☐ Discharge of effluent is now subject to another NPDES general permit or an individual NPDES permit. (*Indicate NPDES permit number and date coverage began below.*)

NPDES Permit No: \_\_\_\_\_ Date Coverage Began: \_\_\_\_\_

☐ There is a new owner / operator of the identified facility. (*Complete additional items below.*)

Date of Owner / Operator Transfer: \_\_\_\_\_

Has the new owner / operator been notified of NPDES general permit requirements?

☐ Yes

☐ No

|  |        |                 |     |
|--|--------|-----------------|-----|
| New Owner / Operator Information   |        |                 |     |
| Name   |        | Mailing Address |     |
| City   | County | State           | Zip |
| Contact Person   | Title  | Phone           |     |
| <b>B.</b> Provide additional detail regarding reason for termination below or in a supplemental letter.  |        |                 |     |
| <b>C.</b> Dischargers using the Categorical Exception shall provide the following information:<br><br>Dischargers authorized to discharge under this General Board Order with an exception to the priority pollutant criteria and objectives must provide certification by a qualified biologist that the receiving water beneficial uses have been restored upon completion of the project. |        |                 |     |

#### IV. CERTIFICATION

|  |        |
|--|--------|
| <p>"I certify under penalty of law that (a) I am not required to be permitted under the Low Threat General Permit No. CAG997001 and (b) this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment."</p> |        |
| Printed Name:  | Title: |
| Signature:   | Date:  |

#### V. MAILING ADDRESS

|   |
|---|
| <p>Send the completed Notice of Termination to the Regional Water Quality Board at the following address:</p> <p style="text-align: center;">California Regional Water Quality Control Board<br/> Colorado River Basin Region<br/> 73-720 Fred Waring, Suite 100<br/> Palm Desert, CA 92260</p> |
|---|

#### FOR REGIONAL WATER BOARD USE ONLY

|  |            |  |  |
|--|------------|--|--|
| <input type="checkbox"/> <b>Approved</b> for Termination |            | <input type="checkbox"/> <b>Denied</b> and returned to Applicant |  |
| Printed Name:  | Signature: | Date   |  |
|  |            | <b>NOT Effective Date:</b><br>____ / ____ / ____                 |  |

## **D.8 Region 8. Santa Ana Regional Water Quality Control Board**

Order No. R8-2009-0003. NPDES No. CAG998001 General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (de minimus) Threat to Water Quality

Order No. R8-2007-0041. NPDES No. CAG918002 General Discharge Permit for Discharges to Surface Waters of Groundwater Resulting From Groundwater Dewatering Operations and/or Groundwater Cleanup Activities at Sites within the San Diego Creek/Newport Bay Watershed Polluted By Petroleum Hydrocarbons, Solvents, Metals and/or Salts

Resolution No. R8-2013-0015. Waiver of Waste Discharge Requirements for Specific Types of Discharges

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State of California  
California Regional Water Quality Control Board  
Santa Ana Region

March 27, 2009

**ITEM:** \*9

**SUBJECT:** Issuance of updated general waste discharge requirements for discharges to surface waters that pose an insignificant (de minimus) threat to water quality – Order No. R8-2009-0003, NPDES NO. CAG998001

**DISCUSSION:**

See attached Order No. R8-2009-0003 and Attachments

**RECOMMENDATIONS:**

Adopt Order No. R8-2009-0003, NPDES No. CAG998001 as presented.

**COMMENT SOLICITATION:**

Comments were solicited from the dischargers and the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt  
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch  
U.S. Fish and Wildlife Service, Carlsbad  
State Water Resources Control Board, Office of the Chief Counsel – David Rice  
State Department of Water Resources, Glendale – Charles Keene  
State Department of Fish and Game, Los Alamitos – Latonio  
State Department of Fish and Game, South Coast Region, San Diego – Dolores Duarle  
California Department of Public Health, Santa Ana - Oliver Pacifico  
California Department of Public Health, San Diego - Steve Williams  
California Department of Public Health, San Bernardino - Sean McCarthy  
San Bernardino County Department of Public Health, Division of Environmental Health Services – Daniel Avera  
San Bernardino County Flood Control and Transportation Department - Naresh Varma  
Riverside County Flood Control and Water Conservation District – Jason Uhley  
Riverside County Environmental Health Department - Sandy Bunchek  
Orange County Public Facilities and Resources Department, Flood Control – Chris Crompton/Andy Ngo  
Orange County Health Care Agency - Larry Honeybourne  
Orange County Resources and Development Management Department – Richard Boon  
Orange County Planning & Development Services Department – Trish McNally  
Orange County Water District - Nira Yamachika  
Orange County Coastkeeper - Garry Brown  
Lawyers for Clean Water C/c San Francisco Baykeeper  
Inland Empire Waterkeeper – Lee Reeder  
Defend the Bay, Newport Beach - Robert J. Caustin  
Current R8-2003-0061 enrollees

**California Regional Water Quality Control Board  
Santa Ana Region**

3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (951) 782-4130 • FAX (951) 781-6288 • TDD (951) 782-3221  
[www.waterboards.ca.gov/santaana](http://www.waterboards.ca.gov/santaana)

**ORDER NO. R8-2009-0003  
NPDES NO. CAG998001**

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES TO SURFACE  
WATERS THAT POSE AN INSIGNIFICANT (DE MINIMUS) THREAT TO WATER QUALITY**

A Discharger, as described in the following table, who has complied with the requirements for coverage under this Order, is authorized to discharge under this Order, once permit coverage is effective, as described in this Order.

|                    |  |
|--------------------|--|
| <b>Dischargers</b> | Individuals/agencies/other parties who discharge wastewater that pose an insignificant (de minimus) threat to water quality of surface waters. |
|--------------------|--|

|  |                       |
|--|-----------------------|
| This Order was adopted by the Regional Water Quality Control Board on:   | <b>March 27, 2009</b> |
| This Order shall become effective on:  | <b>March 27, 2009</b> |
| This Order shall expire on:  | <b>March 1, 2014</b>  |
| The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified these discharges as <b>minor</b> discharges. |                       |

IT IS HEREBY ORDERED, that this Order supersedes Order No. R8-2003-0061 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code (commencing with Section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on March 27, 2009.



**Gerard J. Thibeault, Executive Officer**



SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

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## I. DISCHARGER<sup>1</sup> INFORMATION

### A. Background

Order No. R8-2003-0061, NPDES No. CAG998001 is a general NPDES permit adopted by the California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Water Board), on August 22, 2003 for discharges to surface waters of various types of wastes that pose an insignificant threat to water quality.

On March 4, 2005, Order No. R8-2003-0061 was amended by Order No. R8-2005-0041, allowing the discharge of de minimus discharges within the San Diego Creek/Newport Bay Watershed provided it can be demonstrated that there are no pollutants of concern (selenium and nitrates) in the discharge.

On January 18, 2006, Order No. R8-2003-0061 was again amended by Order No. R8-2006-0004 to include the proposed discharge of decanted backwash filter wastewater and/or sludge dewatering filtrate water from water treatment facilities as one of the types of discharges that may be considered for coverage under this general Order.

To date, 166 Dischargers have been authorized under Order No. R8-2003-0061; of these, 113 are still active. It is anticipated that these existing Dischargers will be submitting renewal applications for continued discharges. The demand for permit issuance will far exceed the available staff resources to develop and bring individual tentative waste discharge requirements to the Board for adoption. These circumstances necessitate the renewal of this general NPDES permit.

### B. Regulatory Approach

1. Order No. R8-2009-0003 (hereinafter, this Order) will update Order No. R8-2003-0061 and will facilitate the processing of permit applications and the implementation of de minimus discharge projects within the Santa Ana Region. However, as discussed in the Fact Sheet (Attachment F), certain types of municipal separate storm sewer system (MS4) permittee discharge activities will no longer be regulated under this Order but will be regulated under the area-wide MS4 permits when these permits are updated appropriately and renewed during the early part of 2009. Similarly, other Waste Discharge Requirement (WDR) holders may no longer be regulated under this Order if their WDRs are appropriately amended. The types of wastewater discharges regulated under this Order include the following discharges:
  - a. Construction dewatering wastes;
  - b. Wastes associated with well installation, development, test pumping and purging;
  - c. Aquifer testing wastes;

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<sup>1</sup> For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- d. Dewatering wastes from subterranean seepage, except for discharges from utility vaults;
  - e. Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
  - f. Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
  - g. Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
  - h. Discharges from potable water supply systems resulting from initial system startup, routine startup, sampling of influent flow, system failures, pressure releases, etc.;
  - i. Discharges from fire hydrant testing or flushing;
  - j. Air conditioning condensate;
  - k. Swimming pool discharge;
  - l. Discharges resulting from diverted stream flows;
  - m. Decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities; and
  - n. Other similar types of wastes as determined by the Regional Water Board Executive Officer, which pose a de minimus threat to water quality yet must be regulated under waste discharge requirements.
2. This Order regulates proposed groundwater related discharges and/or de minimus discharges within the San Diego Creek/Newport Bay Watershed that do not contain nutrients, selenium, and other pollutants of TMDL concern at levels that pose a threat to water quality.
3. The following discharges are excluded from regulation under this Order:
- a. Wastewater with pollutants of concern other than those for which effluent limitations are specified in this Order.
  - b. Wastewater discharges from hydro-testing of contaminated pipes or contaminated vessels or tanks.
  - c. Wastewater discharges from draining of decorative ponds, golf course lakes and ponded water (irrigation tailwater that may commingle with stormwater), unless full characterization of the wastewater for the presence of pesticides, priority pollutants, insecticide, biocide and/or other chemicals that may have been applied to the wastewater is provided. There must be a demonstration that there are no pollutants present at levels of concern.

## II. GENERAL PERMIT APPLICATION

### A. New Dischargers

At least 45 days before the start of a new discharge, the Discharger shall submit an application and obtain the authorization letter from the Executive Officer to discharge wastewater to surface waters. The application shall include the following information:

1. Notice of Intent to be covered under this Order.
2. For projects involving well development, well purging and groundwater extraction or dewatering, a site characterization study that defines the proximity of the extraction well to known contaminated sites, the presence of contaminated groundwater onsite, contaminants and their properties and a three-dimensional assessment of the extent and concentration of contaminants in the subsurface and includes a description of the geologic and hydrologic factors that control the migration of the contaminants. It shall also include a list of known or suspected leaking underground tanks and other facilities or operations which have or may have impacted the quality of the underlying groundwater within 200 feet of the site property lines. If the project site is adjacent or near a contaminated site, considering the depth of extraction well, the groundwater extraction flow rate and other influencing factors, the Discharger shall evaluate the possibility of extracting the contaminated groundwater from the adjacent site and shall determine the time at which contaminated wastewater will reach the groundwater extraction wells.
3. A report that shall include the following:
  - a. A list of constituents and the discharge concentration of each constituent from each source. Unless specified elsewhere in this Order, all laboratory analyses for analyzing pollutant concentration shall be in accordance with 40 CFR 136. For projects involving well development, well purging and groundwater extraction, a representative groundwater sample shall be analyzed for Cadmium, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium<sup>2</sup>, Silver, Zinc, total dissolved solids, total inorganic nitrogen, hardness, perchlorate, and organic pollutants<sup>3</sup>. Test results shall be reported with the reported minimum levels (ML) and the method detection limit (MDL);
  - b. The estimated average and maximum daily flow rates in million gallons per day (mgd), the expected start date of discharge, the frequency and duration of the discharge;
  - c. The proposed discharge location(s) and latitude and longitude for each discharge point;
  - d. A description of the proposed treatment system (if appropriate);

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<sup>2</sup> Use modified EPA Method 200.8 using a Dynamic Reaction Cell (DRC) with an ICP-MS and with reporting limit below 1 µg/L

<sup>3</sup> Using EPA method 8260B.

- e. The affected receiving water;
  - f. A map showing the path from the point of initial discharge to the ultimate receiving water. Please try to limit your maps to size of 8.5" X 11".
- 4. Any other information deemed necessary by the Executive Officer.
  - 5. The application for coverage under this Order, including the NOI (see Attachment B of this Order), map(s), report, and fee, must be submitted to the following address:

Permitting Section  
California Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

## **B. Existing Dischargers**

For existing Dischargers authorized to continue discharging under Order No. R8-2003-0061 after August 1, 2008, discharges will continue to be regulated under the terms and conditions of Order No. R8-2003-0061 until a new discharge authorization is issued, provided that the Discharger submits, no later than April 11, 2009, an updated NOI, a copy of the current Monitoring & Reporting Program previously issued to the Discharger, and proposed treatment modifications (if any). If no application is submitted, the Discharger shall terminate the discharge upon the effective date of this Order.

## **C. Effectivity of Coverage**

Coverage under this Order shall be effective on the date that the Executive Officer issues a discharge authorization letter, which shall include a self monitoring program for the proposed discharge.

## **D. Termination of Coverage**

The Discharger shall inform the Regional Water Board by a letter if coverage under this Order is no longer needed. Upon receipt of said letter, the Regional Water Board Executive Officer or a designee shall issue a letter terminating coverage under this Order.

## **E. Election of Permit Coverage**

Dischargers already covered under the NPDES program, whether by a general or individual permit, may elect to continue coverage under the existing valid permit or may submit a complete application for coverage under this Order. Dischargers who submit a complete application under this Order are not required to submit an individual permit application. The Regional Water Board may request additional information and determine that a Discharger is not eligible for coverage under this Order and would be better regulated under an individual or other general NPDES permit or, for discharges to land, under waste discharge requirements (WDRs). If the Regional Water Board issues an NPDES permit or WDRs, the applicability of this Order to the specified discharge is immediately terminated on the effective date of the NPDES permit or WDRs.

## **III. FINDINGS**

The Regional Water Board finds:

### **A. Background.**

This Order replaces Order No. R8-2003-0061. The NPDES permit number, No. CAG998001, remains the same. Dischargers enrolled under the previous Order No. R8-2003-0061 must obtain coverage under this new Order to continue their authorization to discharge. To obtain authorization for continued and future discharge to waters of the United States, Dischargers must submit a complete application, as described in II.A. and B. above, and obtain coverage in order to be regulated under this Order as provided in 40 Code of Federal Regulations (CFR) Section 122.28 (b)(2).

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

### **B. Industry Description.**

This Order regulates de minimus discharges (as listed in Section I. Discharge Information, above) to surface waters. The discharges are to surface waters, including estuarine and ocean waters, within the Santa Ana Region, including de minimus discharges to Newport Bay and San Diego Creek watershed that do not contain nutrients, selenium, and other pollutants of TMDL concern at levels that pose a threat to water quality or beneficial uses.

- C. Legal Authorities.** This Order is issued pursuant to Section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC) (commencing with Section 13370). It shall serve as an NPDES permit for de minimus point source discharges from facilities to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the California Water Code (commencing with Section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information obtained through issuance and enforcement of the prior general permits for groundwater cleanup discharges, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and, thus constitutes part of the Findings for this Order. Attachments A through E and G through I are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Section 21000 et seq. (*County of Los Angeles v. California State Water Resources Control Board* (2006) 143 Cal.App.4th 985, mod. (Nov. 6, 2006, B184034) 50 Cal.Rptr.3d 619, 632-636.)
- F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at Section 122.44, title 40 of the Code of Federal Regulations<sup>4</sup>, requires that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards (WQS). The discharges authorized by this Order must, at a minimum, meet technology-based requirements and/or Best Professional Judgment (BPJ) standard in accordance with Part 125, Section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet. This Order does not include technology-based Effluent Limitation.
- G. Water Quality-Based Effluent Limitations (WQBELs).** Section 301(b) of the CWA and Section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable WQS.

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All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA Section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in Section 122.44(d)(1)(vi).

**H. Water Quality Control Plans.** The Regional Water Board adopted a revised Water Quality Control Plan for the Santa Ana Region (hereinafter Basin Plan) that became effective on January 24, 1995 (Resolution No. 94-1). The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Santa Ana Region addressed through the Basin Plan. More recently, Resolution No. R8-2004-0001 amended the Basin Plan significantly to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. This Basin Plan amendment was adopted by the Regional Water Board on January 22, 2004. The State Water Resources Control Board (State Water Board) and Office of Administrative Law (OAL) approved the amendment on September 30, 2004 and December 23, 2004, respectively. EPA approved the surface water standards components of the nitrogen/total dissolved solids (N/TDS) amendment on June 20, 2007.

The existing and potential beneficial uses of surface waters in the Santa Ana Region are designated in Chapter 3 of the Basin Plan and may include:

1. Municipal and Domestic Supply,
2. Agricultural Supply,
3. Industrial Service Supply,
4. Industrial Process Supply,
5. Groundwater Recharge,
6. Hydropower Generation,
7. Water Contact Recreation,
8. Non-contact Water Recreation
9. Warm Freshwater Habitat,
10. Limited Warm Freshwater Habitat,
11. Cold Freshwater Habitat,



12. Preservation of Biological Habitats of Special Significance,
13. Wildlife Habitat,
14. Marine Habitat,
15. Shellfish Harvesting,
16. Estuarine Habitat,
17. Rare, Threatened or Endangered Species, and
18. Spawning, Reproduction, and Development.

Many surface waters within the region recharge underlying groundwater basins. The existing and potential beneficial uses of groundwater within the Santa Ana Region generally include:

1. Municipal and Domestic Supply,
2. Agricultural Supply,
3. Industrial Service Supply, and
4. Industrial Process Supply

Requirements of this Order implement the Basin Plan.

- I. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new, numeric criteria for certain priority pollutants in California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the State. The CTR was amended on February 13, 2001. The NTR and CTR contain water quality criteria for priority pollutants. This Order does not include priority pollutants limits, because this Order covers only discharges that pose an insignificant (de minimus) threat to water quality.
- J. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for toxicity control. Requirements of this Order implement the SIP.

**K. Compliance Schedules and Interim Requirements – Not Applicable**

- L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal WQS become effective for CWA purposes. (40 C.F.R. Section 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- M. Stringency of Requirements for Individual Pollutants.** This Order contains water quality based effluent limitations for individual pollutants. This Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet WQS.
- N. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations Section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in the Fact Sheet, the limitations in this Order are at least as stringent as the effluent limitations in the prior Order.
- P. Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

Existing Dischargers enrolled under Order No. R8-2003-0061 who wish to continue discharging under this Order shall, as appropriate, be issued a monitoring and reporting program similar to the previous monitoring and reporting program issued under Order No. R8-2003-0061. For discharges not previously reported the monitoring and reporting program may be revised accordingly.

**Q. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with Section 122.41, and additional conditions applicable to specified categories of permits in accordance with Section 122.42, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under Section 122.42. The Regional Water Board has also included in this Order special provisions applicable to any Dischargers. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

**R. Notification of Interested Parties.** The Regional Water Board has notified the Dischargers currently regulated under Order No. R8-2003-0061 and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of this notification are provided in the Fact Sheet (Attachment F) of this Order.

**S. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

#### **IV. DISCHARGE PROHIBITIONS**

- A. The discharge of oil, trash, industrial waste sludge, or other solids directly to the surface waters in this region or in any manner that will ultimately affect surface waters in this region is prohibited.
- B. The discharge of any substances in concentrations toxic to aquatic life, animal life, or plant life is prohibited.
- C. The discharge of wastes to property not owned or controlled by the Discharger is prohibited.
- D. Odors, vectors, and other nuisances of waste origin are prohibited beyond the limits of each Discharger's facility.
- E. The addition of chemicals to the extracted groundwater, exclusive of chlorine to control biofouling in treatment systems, is prohibited except when approved in writing by the Executive Officer.
- F. There shall be no direct discharges of waste to Areas of Special Biological Significance such as Newport Beach Marine Life Refuge and Irvine Coast Marine Life Refuge.

## V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The limitations apply at the point of the discharge. If the receiving surface water body is dry and the wastewater percolates to the same groundwater management zone from which the groundwater was extracted and/or dewatered, these limitations do not apply.

### A. Effluent Limitations and Discharge Specifications

#### 1. Final Effluent Limitations

- a. The Discharger shall maintain compliance with the following effluent limitations at approved compliance point monitoring locations:

**Table 1. Effluent Limitations Applicable to All Receiving Waters**

| Constituent                          | Maximum Daily Concentration Limit in milligrams per liter (mg/L) |
|--------------------------------------|--|
| Total Dissolved Solids (TDS)         | See Section A.4. and Section A.5., below                         |
| Total Inorganic Nitrogen (TIN)       | See Section A.4. and Section A.5., below                         |
| Total Petroleum Hydrocarbons         | 0.1 mg/L   |
| Total Residual Chlorine <sup>5</sup> | 0.1 mg/L   |
| Suspended Solids                     | 75 mg/L  |
| Sulfides                             | 0.4 mg/L   |
| Oil and Grease                       | 15 mg/L  |

2. The pH of the discharge shall be within 6.5 and 8.5 pH units (see also Receiving Water Limitations B.2.g.).
3. There shall be no visible oil and grease in the discharge.
4. The discharge of decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities shall not contain a total suspended solids maximum daily concentration in excess of 30 mg/L.
5. For discharges to surface waters where groundwater will not be affected by the discharge, the TDS and/or TIN of the effluent shall not exceed the water quality objectives for the receiving surface water where the effluent is discharged, as specified in Table 4-1 of the Basin Plan for the Santa Ana Region.

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<sup>5</sup> If chlorine is used for treatment or disinfection of wastes.

6. For discharges to surface waters where the groundwater will be affected by the discharge, the TDS and/or TIN concentrations of the effluent shall not exceed the water quality objectives for the surface water where the effluent is discharged nor the affected groundwater management zone, as specified in Table 4-1 of the Basin Plan for the Santa Ana Region. The more restrictive water quality objectives shall govern. However, treated effluent exceeding the groundwater management zone water quality objectives may be returned to the same management zone from which it was extracted without reduction of the TDS or TIN concentrations so long as the concentrations of those constituents are no greater than when the groundwater was first extracted. Incidental increases in the TDS and TIN concentrations (such as may occur during air stripping) of treated effluent will not be considered increases for the purposes of determining compliance with this discharge specification.

**B. Land Discharge Specifications – Not Applicable**

**C. Reclamation Specifications – Not Applicable**

**VI. RECEIVING WATER LIMITATIONS**

**A. Surface Water Limitations**

1. The discharge of wastes shall not cause a violation of any applicable WQS for receiving waters adopted by the Regional Water Board or the State Water Board, as required by the Federal CWA and any regulations adopted thereunder.
2. The discharge shall not cause any of the following:
  - a. Coloration of the receiving waters that causes a nuisance or adversely affects beneficial uses. The natural color of fish, shellfish or other inland, bay and estuarine water resources used for human consumption shall not be impaired.
  - b. Deposition of oil, grease, wax or other materials in the receiving waters in concentrations that result in a visible film or in coating objects in the water, or which cause a nuisance or adversely affect beneficial uses.
  - c. An increase in the amounts of suspended or settleable solids in the receiving waters that will cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.
  - d. Taste or odor producing substances in the receiving waters at concentrations that cause a nuisance or adversely affect beneficial uses.
  - e. The presence of radioactive materials in the receiving waters in concentrations that is deleterious to human, plant or animal life.
  - f. The depletion of the dissolved oxygen concentration below 5.0 mg/L.

- g. The temperature of the receiving waters to be raised above 90°F (32°C) during the period of June through October, or above 78°F (26°C) during the rest of the year.
  - h. Change the ambient pH levels more than 0.5 pH units.
  - i. The concentration of pollutants in the water column, sediments, or biota to adversely affect the beneficial uses of the receiving water. The discharge shall not result in the degradation of inland surface water communities and populations, including vertebrate, invertebrate, and plant species.
3. Pollutants not specifically mentioned and limited in this Order shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health or animal life.

#### **B. Groundwater Limitations**

- 1. The discharge shall not cause the underlying groundwater to be degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.
- 2. The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentrations greater than background water quality.

### **VII. PROVISIONS**

#### **A. Standard Provisions**

- 1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
- 2. Neither the treatment nor the discharge of waste shall create, or threaten to create, a nuisance or pollution as defined by Section 13050 of the California Water Code.
- 3. This Order expires on March 1, 2014. However, coverage under the Order shall continue in force and effect until a new Order is issued. Only those Dischargers authorized to discharge under the expiring Order are covered by the continued Order. Upon reissuance of a new Order, the Dischargers shall file a new application within 45 days of the effective date of the new order and obtain a new authorization to discharge from the Executive Officer.

4. The Executive Officer shall determine whether the proposed discharge is eligible for coverage under this Order, after which, the Executive Officer may;
  - a. Authorize the proposed discharge by transmitting a "Discharge Authorization Letter" to the discharge proponent (now an "Authorized Discharger") authorizing the initiation of the discharge under the conditions of this Order and any other conditions consistent with this Order which are necessary to protect the beneficial uses of the receiving waters; or,
  - b. Require the discharge proponent to obtain an individual NPDES permit prior to any discharge to surface waters within the Santa Ana Region.
5. The Executive Officer is authorized to issue a single discharge authorization letter to a Discharger proposing unknown future de minimus discharges at multiple locations within the Santa Region, provided that the general nature of the discharges and the general locations are reported and included in the application to discharge wastes under this general permit and that at least five days prior to each discharge, more detailed information regarding each discharge is reported. (see section VIII.B.4.)
6. The Discharger shall comply with all the requirements of this Order and the terms and conditions of the discharge authorization letter. The discharge authorization letter from the Executive Officer shall identify the discharge location(s), specify any conditions necessary to protect the beneficial uses of the receiving waters, and shall specify the Self-Monitoring Program for the proposed discharge in accordance with this Order. The discharge authorization letter may be terminated or revised by the Executive Officer at any time. Any and all discharge authorization letters, which may be issued by the Executive Officer pursuant to this Order, are incorporated by reference into this Order.
7. For projects involving groundwater dewatering, the Discharger shall assure that extraction wells at the project site are properly abandoned/demolished or sealed at the completion of the project, to prevent the occurrence of future groundwater contamination resulting from groundwater extraction wells.
8. The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order.
9. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

10. The Discharger shall take all reasonable steps to minimize any adverse impacts to receiving waters resulting from noncompliance with any effluent limitations specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. When adverse impacts are identified following exceedance of effluent limitation(s), and/or violation of discharge prohibitions and provisions, Dischargers shall mitigate impacts in accordance with a plan approved by the Executive Officer. The proposed plan shall be submitted within 30 days of the finding of an adverse impact.
11. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment (and related appurtenances) and control which are installed or used by the Discharger to achieve compliance with this Order and the conditions of the discharge authorization letter(s) from the Executive Officer. Proper operation and maintenance shall include the following:
  - a. Effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls and appropriate quality assurance procedures.
  - b. Regular maintenance and inspection of all systems.
  - c. Maintenance of records of the inspection results that shall be made available to the Regional Water Board whenever required and demanded.
12. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate these requirements.
13. This Order does not convey any property rights of any sort, or any exclusive privilege.
14. This Order is not transferable to any person except after notice to and approval by the Regional Water Board.
15. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the Discharger from liabilities arising under federal, State, or local laws, nor guarantee the Discharger a capacity right in the receiving waters.
16. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.



17. Any violation of this Order constitutes a violation of the CWA, its regulations, and the California Water Code, and is grounds for enforcement action and/or termination of the authorization to discharge.
18. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, State, or federal law enforcement entities.
19. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, discharge limitation (e.g., maximum daily effluent limitation), or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (951) 782-4130 within 24 hours of having knowledge of such noncompliance that may endanger public health or the environment, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

## **B. Monitoring and Reporting Program (MRP) Requirements**

The Discharger shall comply with the monitoring and reporting program issued by the Executive Officer with the discharge authorization letter. Revision of this monitoring and reporting program by the Executive Officer may be necessary to confirm that the Discharger is in compliance with the requirements and provisions contained in this Order. Revisions may be made by the Executive Officer at any time during the term of this Order, and may include a reduction or an increase in the number of constituents to be monitored, the frequency of monitoring or the number and size of samples collected. Reduction in the number of constituents being monitored and/or frequency of monitoring shall be considered only if the following conditions are satisfied:

1. Only Dischargers without any criminal convictions under any (federal, State, or local) environmental statute and who have been assessed no civil or administrative liability for violations of any NPDES permit are eligible.
2. Only Dischargers covered under the previous Order No. R8-2003-0061 or under an existing individual permit for the last consecutive two years who have had no effluent violations of monitored constituents during the last two years are eligible.
3. Constituents with effluent limitations shall be monitored at least once per year.
4. Reductions in monitoring frequency can be considered by the Executive Officer under the following conditions:

- a. For a specific constituent, reduction of weekly monitoring to bi-monthly (every two weeks) monitoring can be considered for approval by the Executive Officer when the effluent monitoring data for the last 3 months shows compliance with effluent limitations.
- b. For a specific constituent, reduction of bi-monthly (every two weeks) monitoring to monthly monitoring can be considered for approval by the Executive Officer when the effluent monitoring data for the last 6 months shows compliance with effluent limitations.
- c. For a specific constituent, reduction of monthly monitoring to quarterly monitoring can be considered for approval by the Executive Officer when the effluent monitoring data for the last 12 months show compliance with effluent limitations.

## **C. Special Provisions**

### **1. Reopener Provisions**

- a. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.
- b. If more stringent applicable WQS are promulgated or approved pursuant to Section 303 of the CWA, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such standards.
- c. This Order may be reopened to address any changes in State or federal plans, policies or regulations that would affect the requirements for the discharges covered by this Order.
- d. Any permit noncompliance constitutes a violation of the CWA and the California Water Code and is grounds for: (1) an enforcement action; (2) permit or authorization letter termination, revocation and reissuance, or modification; (3) the issuance of an individual permit; or (4) for denial of a renewal application.
- e. This Order may be modified by the Regional Water Board prior to the expiration date to include effluent or receiving water limitations for toxic constituents determined to be present in significant amounts in the discharge through the comprehensive monitoring program included as part of this Order.
- f. This Order may be modified, revoked and reissued, or terminated for cause.

### **2. Special Studies, Technical Reports and Additional Monitoring Requirements – Not Applicable**

**3. Best Management Practices and Pollution Prevention - Not Applicable**

**4. Construction, Operation and Maintenance Specifications – Not Applicable**

**5. Special Provisions for Municipal Facilities (POTWs Only) - Not Applicable**

**6. Other Special Provisions**

- a. If two consecutive monitoring sample results collected pursuant to the accelerated monitoring program specified in Section IV.A.3. and IV.A.5. of Attachment E also show results in excess of effluent limits and/or greater than the pollutants values listed in Attachment I, or equal or exceed the maximum contaminant level (MCL) values listed in the Attachment I, then the Discharger must cease discharging and notify the Regional Water Board to determine a further course of action.
- b. Proposed wastewater (de minimus) discharges as defined in Section I.B.1. (1.e. through 1.n., excluding 1.l.) within the San Diego Creek/Newport Bay watershed that do not contain nutrients, selenium and other TMDL pollutants of concern at levels that pose a threat to water quality or beneficial uses may apply for coverage under this Order.
- c. The Discharger shall file with the Regional Water Board a report of waste discharge at least 45 days before making any material change or proposed change in the character, location, volume, treatment, or disposal methods of the discharge.
- d. In the event of any change in control or ownership of real property or waste discharge facility currently owned or controlled by the Discharger and which facility or real property are subject to this Order , the Discharger shall notify the succeeding owner of the real property or operator of the facility of the existence of this Order by letter, a copy of which signed by the new owner accepting responsibility for complying with this Order shall be forwarded to the Executive Officer at least 30 days in advance of transfer of ownership..
- e. The Discharger shall furnish, within a reasonable time, any information the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Dischargers coverage under this Order. The Discharger shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.
- f. As appropriate, the regulation of the following types of discharges by MS4 permittees shall be transferred to the MS4 permits issued to the cities, municipalities and Counties within the Santa Ana Region, when updated MS4 permits with applicable terms and conditions necessary to address the regulation of these discharges are adopted and effective.

- (1) Dewatering wastes from subterranean seepage, except for discharges from utility vaults;
- (2) Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
- (3) Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
- (4) Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
- (5) Discharges from potable water supply systems resulting from initial system startup, routine startup, sampling of influent flow, system failures, pressure releases, etc.;
- (6) Discharges from fire hydrant testing or flushing;
- (7) Air conditioning condensate;
- (8) Swimming pool discharge;
- (9) Discharges resulting from diverted stream flows; and
- (10) Construction dewatering wastes.

#### **7. Compliance Schedules - Not Applicable**

### **VIII. COMPLIANCE DETERMINATION**

1. Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e.g., weekly, monthly, quarterly), that sample shall serve to characterize the discharge for the entire interval.
2. When determining compliance, based on a single sample, with a single effluent limitation which applies to a group of chemicals (e.g., PCBs), concentrations of individual members of the group may be considered to be zero if the analytical response for individual chemicals falls below the MDL for that chemical.
3. Maximum Daily Effluent Limitation or Maximum Daily Concentration Limit. If a daily discharge (or when applicable, the median for multiple sample data of a daily discharge) exceeds the limit for a given parameter, the Discharger will be considered out of compliance for that parameter for that day only within the reporting period. For any day during which no sample is taken, no compliance determination can be made for that day.

## ATTACHMENT A – DEFINITIONS

**Areas of Special Biological Significance (ASBS)** are those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of State Water Quality Protection Areas.

**Arithmetic Mean ( $\mu$ )**, also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \mu = \Sigma x / n \quad \text{where: } \Sigma x \text{ is the sum of the measured ambient water concentrations, and } n \text{ is the number of samples.}$$

**Average Monthly Effluent Limitation (AMEL):** the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Best Management Practices (BMPs)** are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and non-structural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

**Best Professional Judgment (BPJ) –Based Limits** are technology-based NPDES permits derived on a case-by-case basis using all reasonably available and relevant data for non-municipal facilities in the absence of effluent limitations guidelines (ELG).

**Bioaccumulative** pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

**Carcinogenic** pollutants are substances that are known to cause cancer in living organisms.

**Coefficient of Variation (CV)** is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

**Cooling water** for purposes of this Order means water used for cooling of equipment which does not come into direct contact with any raw product, intermediate product (other than heat) or finished product.

**Criteria Continuous Concentration (CCC)** equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.

**Criteria Maximum Concentration (CMC)** equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

**Decanted Backwash Filter Wastewater:** Water Treatment Plants are facilities that treat groundwater or surface water to produce potable water. The treatment processes include coagulation, sedimentation, and filtration to remove suspended solids and other pollutants from the intake water. Wastewater discharges come mainly from backwashing of filters and dewatering of sludge. Filter backwashing is an integral part of the water treatment plant operation. Filters are typically cleaned by flushing them with water in the reverse direction to normal flow. The water flow must have sufficient force to separate particles from the filter media, so a greater than normal flow is used. The resulting water, called waste or spent filter backwash water, carries particles flushed from the filters, including microbes (such as *Cryptosporidium*), raw water particles, and particles from the coagulation process. Spent filter backwash is allowed to settle in a clarifier or sedimentation tank. The decanted water is discharged either to the storm drain or to surface waters. The settled particulates (sludge) are either dried through sludge drying beds or dewatered using belt press. Dewatered sludge is hauled offsite for proper disposal.

**Detected, but Not Quantified (DNQ)** are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

**Effluent Concentration Allowance (ECA)** is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Estimated Chemical Concentration** is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Existing Discharger** means any discharger that is not a new discharger. An existing discharger includes an “increasing discharger” (i.e., an existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its existing permitted discharge after the effective date of the State Implementation Policy).

**Infeasible** means not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

**Inland Surface Waters** are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

**Load Allocation (LA)** is the portion of receiving water's total maximum daily load that is allocated to one of its non-point sources of pollution or to natural background sources.

**Maximum Daily Effluent Limitation (MDEL)** means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

**Maximum Daily Flow** is the maximum flow sample of all samples collected in a calendar day.

**MEC:** Maximum Effluent Concentration.

**Median** is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

**Method Detection Limit (MDL)** is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

**Minimum Level (ML)** is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

**Mixing Zone** is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

**Non-contact cooling water** is water used for cooling that does not come into direct contact with any raw material, product, byproduct, or waste. It includes water generated from any cooling equipment blowdown or produced as a result of any non-contact cooling process through either a single pass (once through) or recirculating system. Most non-contact cooling water systems are also open recirculating cooling systems (see definition below).

**Not Detected (ND)** are those sample results less than the laboratory's MDL.

**Objectionable Bottom Deposits** are an accumulation of materials or substances on or near the bottom of a water body, which creates conditions that adversely impact aquatic life, human health, beneficial uses, or aesthetics. These conditions include, but are not limited to, the accumulation of pollutants in the sediments and other conditions that result in harm to benthic organisms, production of food chain organisms, or fish egg development. The presence of such deposits shall be determined by RWQCB(s) on a case-by-case basis.

**Open Recirculating Cooling Water Systems** use the same water repeatedly to cool process equipment. Heat absorbed from the process must be dissipated to allow reuse of the water. Cooling towers, spray ponds, and evaporative condensers are used for this purpose.

**Persistent pollutants** are substances for which degradation or decomposition in the environment is nonexistent or very slow.

**Pollutant Minimization Program (PMP)** means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.



**Pollution Prevention** means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

**Reporting Level (RL)** is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP<sup>1</sup> in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

**Sludge Dewatering Filtrate Water:** Some water treatment facilities do not dewater the sludge but rather discharge the sludge directly to the sanitary sewer line. Those water treatment facilities that do dewater the sludge may employ a sludge thickener and/or a belt filter press. The resulting filtrate water from the sludge dewatering operation is the wastewater being discharged.

**Source of Drinking Water** is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

**Standard Deviation ( $\sigma$ )** is a measure of variability that is calculated as follows:

$$\sigma = \left( \frac{\sum[(x - \mu)^2]}{(n - 1)} \right)^{0.5}$$

where:

- x is the observed value;
- $\mu$  is the arithmetic mean of the observed values; and
- n is the number of samples.

**Technology Based Effluent Limitation** is a permit limit for a pollutant that is based on the capability of a treatment method to reduce the pollutant to a certain concentration.

**Water Effect Ratio (WER)** is an appropriate measure of the toxicity of a material obtained in a site water divided by the same measure of the toxicity of the same material obtained simultaneously in a laboratory dilution water.

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<sup>1</sup> SIP refers to the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

**12-Month Running Average Effluent Limitation (12-MRAEL):** the highest allowable average of monthly discharges over last twelve months, calculated as the sum of all monthly discharges measured during last twelve months divided by the number of monthly discharges measured during that time period.

California Regional Water Quality Control Board  
Santa Ana Region

**NOTICE OF INTENT**

TO COMPLY WITH THE TERMS AND CONDITIONS OF THE GENERAL PERMIT TO DISCHARGE WASTEWATER  
THAT POSE INSIGNIFICANT (DE MINIMUS) THREAT TO WATER QUALITY  
(Order No. R8-2009-0003, NPDES No. CAG998001)

**I. PERMITTEE** (*Person/Agency Responsible for the Discharge*)

Agency/Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Street City State ZIP

Contact Person: \_\_\_\_\_; Phone: (\_\_\_\_\_) \_\_\_\_\_; Email: \_\_\_\_\_

**II. FACILITY**

Name: \_\_\_\_\_

Location: \_\_\_\_\_

Street City State ZIP

Contact Person: \_\_\_\_\_; Phone: (\_\_\_\_\_) \_\_\_\_\_; Email: \_\_\_\_\_

a. Projected Flow Rate (*gpd*): \_\_\_\_\_, b. Receiving Water (*identify*): \_\_\_\_\_

**III. BILLING INFORMATION** (*Where annual fee invoices should be sent*)

Agency/Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Street City State ZIP

Contact Person: \_\_\_\_\_; Phone: (\_\_\_\_\_) \_\_\_\_\_; Email: \_\_\_\_\_

**IV. INDICATE EXISTING PERMIT NUMBER:** (*if applicable*)

a. Individual permit Order No. \_\_\_\_\_ NPDES No. \_\_\_\_\_

b. General Permit Order No. R8-2003-0061- \_\_\_\_\_

c. Others (specify) \_\_\_\_\_

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Remarks: *If changes to facility ownership and/or treatment processes were made after the issuance of the existing permit, please provide a description of such changes on another sheet and submit it with this Notice of Intent.*

**V. OTHER REQUIRED INFORMATION - FOR NEW DISCHARGERS AND FOR NEW DISCHARGES AND LOCATIONS NOT PREVIOUSLY REPORTED BY EXISTING DISCHARGERS.**

Please provide a COMPLETE characterization of your discharge. A complete characterization includes, but is not limited to:

- a. Please provide a paragraph or more describing the actual project(s), i.e. construction dewatering, well development, well pump test, water line maintenance, etc. (a more complete list appears on page 3 and 4 of Order No. R8-2009-0003). Please elaborate on the purpose of the activity, and how it creates the discharge. If more than one activity is planned, please give a description of each one. Also, please indicate the frequency of the discharges if possible, (i.e. one time only, one week only, daily, weekly, monthly, as needed, etc.)

- b. A list of constituents in the discharge and concentration of each constituent;
- c. The estimated average and maximum daily flow rate (gallons per day); the frequency and duration of the discharge and the date(s) when discharge will start/end;
- d. The proposed discharge location(s) as latitude and longitude for each discharge point;
- e. A description of the proposed treatment system (if appropriate);
- f. The name/location of the initial receiving water (storm drain/creek), and the ultimate receiving water, such as the Pacific Ocean, Reach 3 of the Santa Ana River, etc.;
- g. A map showing the path from the point of initial discharge to the ultimate receiving water. Please try to limit your maps to size of 8.5" X 11".
- h. A list of known or suspected leaking underground tanks and other facilities or operations that have, or may have impacted the quality of the underlying groundwater within 200 feet of the site property lines for projects with expected discharge flow rates of less than 100,000 gallons per day and within 500 feet of the site property lines for projects with expected discharge flow rates of greater than 100,000 gallons per day.
- i. Any other information deemed necessary by the Executive Officer.

## VI. OTHER

Attach additional sheets to explain any responses which need clarification. List attachments with titles and dates below:

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You will be notified by a representative of the RWQCB within 30 days of receipt of your application. The notice will state if your application is complete or if there is additional information you must submit to complete your application, pursuant to Division 7, Section 13260 of the California Water Code.

## VII. FEE

The current fee for coverage under this general permit is \$1,943.00. Checks should be made payable to the State Water Resources Control Board or SWRCB. A fee must accompany this application for all new discharges.

## VIII. CERTIFICATION:

*I certify under penalty of law that I am an authorized representative of the permittee and that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the permittee will comply with the terms and conditions stipulated in Order No. R8-2009-0003, including the monitoring and reporting program issued by the Executive Officer of the Regional Board.*

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
(type or print) (type or print)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_; Email: \_\_\_\_\_

## **ATTACHMENT D – STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [40 *CFR* §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement [40 *CFR* §122.41(a)(1)].

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [40 *CFR* §122.41(c)].

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [40 *CFR* §122.41(d)].

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [40 *CFR* §122.41(e)].

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 *CFR* §122.41(g)].

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [40 CFR §122.5(c)].

## **F. Inspection and Entry**

The Discharger shall allow the Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383(c)]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [40 CFR §122.41(m)(2)].

3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice) [40 CFR Section 122.41(m)(3)(ii)].

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR §122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR Section 122.41(n)(2)].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 *CFR* §122.41(n)(3)]:
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 *CFR* §122.41(n)(3)(i)];
  - b. The permitted facility was, at the time, being properly operated [40 *CFR* §122.41(n)(3)(i)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) [40 *CFR* Section 122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 *CFR* §122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 *CFR* §122.41(n)(4)].

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [40 *CFR* §122.41(f)].

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [40 *CFR* §122.41(b)].

### **C. Transfers**

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [40 *CFR* §122.41(l)(3)] [40 *CFR* §122.61].



### **III. STANDARD PROVISIONS – MONITORING**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR §122.41(j)(1)].
- B.** Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [40 CFR §122.41(j)(4)] [40 CFR §122.44(i)(1)(iv)].

### **IV. STANDARD PROVISIONS – RECORDS**

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR §122.41(j)(2)].

**B. Records of monitoring information shall include:**

- 1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];
- 2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
- 3. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
- 4. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
- 5. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
- 6. The results of such analyses [40 CFR §122.41(j)(3)(vi)].

**C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:**

- 1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and

2. Permit applications and attachments, permits and effluent data [*40 CFR §122.7(b)(2)*].

## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, SWRCB, or USEPA within a reasonable time, any information which the Regional Water Board, SWRCB, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, SWRCB, or USEPA copies of records required to be kept by this Order [*40 CFR §122.41(h)*] [*CWC 13267*].

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below [*40 CFR Section 122.41(k)*].
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [*40 CFR Section 122.22(a)(3)*].
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above [*40 CFR Section 122.22(b)(1)*];
  - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [*40 CFR Section 122.22(b)(2)*]; and
  - c. The written authorization is submitted to the Regional Water Board and State Water Board [*40 CFR Section 122.22(b)(3)*].

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V B 3 above must be submitted to the Regional Water Board, State Water Board or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR Section 122.22(c)].
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations” [40 CFR Section 122.22(d)].

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or SWRCB for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [40 CFR §122.41(l)(4)(iii)].

### **D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [40 CFR §122.41(l)(5)].

## **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR §122.41(l)(6)(iii)].

## **F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR §122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [40 CFR §122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §122.41(l)(1)(ii)].
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 CFR §122.41(l)(1)(iii)].

### **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or SWRCB of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [40 CFR §122.41(l)(2)].

### **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above [40 CFR Section 122.41(l)(7)].

### **I. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, SWRCB, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR §122.41(l)(8)].

## **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387.

## **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

### **A. Publicly-Owned Treatment Works (POTWs)**

All POTWs shall provide adequate notice to the Regional Water Board of the following [40 CFR Section 122.42(b)]:

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the CWA if it were directly discharging those pollutants [40 CFR Section 122.42(b)(1)]; and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [40 CFR Section 122.42(b)(2)].
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [40 CFR Section 122.42(b)(3)].

## Attachment E – Monitoring and Reporting Program

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## **Attachment E – Monitoring and Reporting Program (MRP)**

The Code of Federal Regulations (CFR) at 40 CFR §122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement the federal and California regulations.

### **I. GENERAL MONITORING PROVISIONS**

#### **A. General Monitoring Provision**

1. All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).
2. All laboratory analyses<sup>1, 2</sup> shall be performed in accordance with test procedures under 40 CFR 136 (revised as of April 11, 2007) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (EPA), unless otherwise specified in this MRP. In addition, the Regional Water Board and/or EPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136.
3. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with the provision of Water Code Section 13176, or conducted at a laboratory certified for such analyses by the EPA or at laboratories approved by the Regional Water Board's Executive Officer.
4. In conformance with federal regulations 40 CFR 122.45(c), analyses to determine compliance with the effluent limitations for metals shall be conducted using the total recoverable method. For Chromium (VI), the dissolved method in conformance with 40 CFR 136 may be used to measure compliance with the Chromium (VI) limitation.

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<sup>1</sup> For Selenium testing use modified EPA Method 200.8 using a Dynamic Reaction Cell (DRC) with an ICP-MS and with reporting limit below 1 ug/L

<sup>2</sup> For testing organic volatile compounds use EPA Method 8260B and report entire suite of detected constituents

5. The Discharger shall require its testing laboratory to calibrate the analytical system down to the minimum level (ML)<sup>3</sup> specified in Attachment “H” for priority pollutants with effluent limitations in this Order, unless an alternative reporting level is approved by the Regional Water Board’s Executive Officer. When there is more than one ML value for a given substance, the Discharger shall use the ML values, and their associated analytical methods, listed in Attachment “H” that are below the calculated effluent limitation. The Discharger may select any one of those cited analytical methods for compliance determination. If no ML value is below the effluent limitation, then the lowest ML value and its associated analytical method, listed in Attachment “H” shall be used. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.
6. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
  - a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
  - b. Sample results less than the reported ML, but greater than or equal to the laboratory’s current Method Detection Limit (MDL)<sup>4</sup>, shall be reported as “Detected, but Not Quantified,” or “DNQ.” The estimated chemical concentration of the sample shall also be reported.
  - c. Sample results not detected above the laboratory’s MDL shall be reported as “not detected” or “ND.”
7. The Discharger shall submit to the Regional Water Board reports necessary to determine compliance with effluent limitations in this Order. The Discharger shall report with each sample result:
  - a. The reporting level achieved by the testing laboratory; and
  - b. The laboratory’s current MDL, as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007).

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<sup>3</sup> Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

<sup>4</sup> MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analytical concentration is greater than zero, as defined in 40 CFR 136, Appendix B, revised as of April 11, 2007.



8. For receiving water monitoring and for those priority pollutants without effluent limitations, the Discharger shall require its testing laboratory to quantify constituent concentrations to the lowest achievable MDL as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007)<sup>5</sup>. In situations where the most stringent applicable receiving water objective (freshwater or human health (consumption of organisms only), as specified for that pollutant in 40 CFR 131.38<sup>6</sup> is below the minimum level value specified in Attachment "H" and the Discharger cannot achieve an MDL value for that pollutant below the ML value, the Discharger shall submit justification why a lower MDL value cannot be achieved. Justification shall be submitted together with monthly monitoring reports.
9. The Discharger shall have, and implement an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by the Regional Water Board or EPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study.
10. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, the actions undertaken or proposed that will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when compliance with the time schedule has been achieved.
11. The Discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years (this retention period supercedes the retention period specified in Section IV.A. of Attachment D) from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Water Board at any time. Records of monitoring information shall include:
  - a. The information listed in Attachment D- IV Standard Provisions – Records, subparagraph B. of this Order;
  - b. The laboratory which performed the analyses;
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The modification(s) to analytical techniques or methods used;
  - f. All sampling and analytical results, including
    - (1) Units of measurement used;
    - (2) Minimum reporting level for the analysis (minimum level);

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<sup>5</sup> For Selenium testing use modified EPA Method 200.8 using a Dynamic Reaction Cell (DRC) with an ICP-MS and with reporting limit below 1 ug/L

<sup>6</sup> See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.

- (3) Results less than the reporting level but above the method detection limit (MDL);
    - (4) Data qualifiers and a description of the qualifiers;
    - (5) Quality control test results (and a written copy of the laboratory quality assurance plan);
    - (6) Dilution factors, if used; and
    - (7) Sample matrix type.
  - g. All monitoring equipment calibration and maintenance records;
  - h. All original strip charts from continuous monitoring devices;
  - i. All data used to complete the application for this Order; and,
  - j. Copies of all reports required by this Order.
  - k. Electronic data and information generated by the Supervisory Control And Data Acquisition (SCADA) System.
12. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.
13. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the Discharger shall obtain a representative grab sample each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the Discharger shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.
14. Monitoring and reporting shall be in accordance with the following:
- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. The monitoring and reporting of influent, effluent, and sludge shall be done more frequently as necessary to maintain compliance with this Order and or as specified in this order.
  - c. Whenever the Discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.
  - d. A "grab" sample is defined as any individual sample collected in less than 15 minutes.

- e. A composite sample is defined as a combination of no fewer than eight individual grab samples obtained over the specified sampling period. The volume of each individual grab sample shall be proportional to the discharge flow rate at the time of sampling. The compositing period shall equal the specific sampling period, or 24 hours, if no period is specified.
- f. Daily samples shall be collected on each day of the week.
- g. Monthly samples shall be collected on any representative day of each month.
- h. Quarterly samples: A representative sample shall be taken on any representative day of January, April, July, and October and test results shall be reported in either micrograms/liter (ug/L) or milligrams/liter (mg/L) or nanograms/L (ng/L), as appropriate, by the last day of the month following the month that the sample was taken.
- i. Semi-annual samples shall be collected in January and July.
- j. Annual samples shall be collected in January to December.

## II. MONITORING LOCATIONS

The Discharger shall establish monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order: The sample station shall be located where representative samples of the discharge can be obtained. The volume of daily discharge shall be recorded daily on a permanent log.

## III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

## IV. EFFLUENT MONITORING REQUIREMENTS

A. The following shall constitute the effluent monitoring program for discharges other than decant filter backwash wastewater and/or sludge dewatering filtrate water. If there is no discharge see Section VIII.B.5., below.

- 1. For intermittent (less than daily) discharge flow of less than 25,000 gallons per day (gpd), effluent monitoring is as follows:

**Table 1. Effluent Monitoring Program for Flow Less than 25,000 GPD**

| Parameter | Unit | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method and Minimum Level, units, respectively |
|-----------|------|-------------|----------------------------|--|
| Flow      | gpd  | measured    | Each discharge event       | See Section I.A.3. above, of this MRP                                  |

**Table 1. Effluent Monitoring Program for Flow Less than 25,000 GPD**

| Parameter                            | Unit       | Sample Type | Minimum Sampling Frequency   | Required Analytical Test Method and Minimum Level, units, respectively |
|--------------------------------------|------------|-------------|--|--|
| Total Petroleum Hydrocarbons         | µg/L       | Grab        | Once monthly or as directed by the Executive Officer thereafter; see also Section IV.A.3.                                    | EPA METHOD 8015 Modified   |
| Oil and Grease                       | mg/L       | Grab        | Once monthly or as directed by the Executive Officer thereafter; see also Section IV.A.3.                                    | See Section I.A.2. above, of this MRP                                  |
| Total Residual Chlorine <sup>7</sup> | mg/L       | Grab        | "  | See Section I.A.2. above, of this MRP                                  |
| Total Suspended Solids <sup>8</sup>  | mg/L       | "           | "  | "  |
| Total Inorganic Nitrogen (TIN)       | mg/L       | "           | "  | "  |
| Sulfate                              | mg/L       | "           | "  | "  |
| pH                                   | Std. Units | "           | "  | "  |
| Total Dissolved Solids               | mg/L       | Grab        | Annually, see also Section IV.A.3.   | "  |
| Hardness                             | mg/L       | "           | "  | "  |
| Pollutants listed in Attachment "I"  | µg/L       | Grab        | Once during the first <sup>9</sup> 30 minutes of the discharge and annually thereafter; see also Section IV.A.4. and IV.A.5. | See Section I.A.2. & I.A.3. above, of this MRP                         |

<sup>7</sup> Unless it is known that chlorine is not in the discharge.

<sup>8</sup> Not applicable if all wastewater will percolate prior to reaching receiving waters.

<sup>9</sup> If the pollutants were monitored at the outset during the application process, the Discharger may submit the analytical results in lieu of the first sampling event.

2. For discharge flow of 25,000 gpd or more, effluent monitoring is as follows:

**Table 2. Effluent Monitoring Program for Flow Over 25,000 GPD**

| Parameter  | Unit       | Sample Type<br>See also<br>IV.A.6.,<br>below | Minimum<br>Sampling<br>Frequency  | Required Analytical Test<br>Method and Minimum<br>Level, units, respectively |
|--|------------|--|---|--|
| Flow   | gpd        | measured                                     | Daily   | See Section I.A.3. above,<br>of this MRP                                     |
| Total Petroleum<br>Hydrocarbons                      | µg/L       | Grab   | During the first 30<br>minutes of the<br>discharge, then<br>monthly see also<br>Section IV.A.3.   | EPA METHOD 8015<br>Modified  |
| Oil and Grease                                       | mg/L       | Grab   | "   | See Section I.A.3. above,<br>of this MRP                                     |
| Total Residual Chlorine <sup>10</sup>                | mg/L       | Grab   | "   | See Section I.A.3. above,<br>of this MRP                                     |
| Total Suspended Solids <sup>11</sup>                 | mg/L       | "  | During the first 30<br>minutes of each<br>discharge event,<br>then monthly, see<br>also Section IV.A.3.                                       | "  |
| Total Inorganic Nitrogen<br>(TIN)                    | mg/L       | "  | "   | "  |
| Sulfate  | mg/L       | "  | "   | "  |
| pH   | Std. Units | "  | "   | "  |
| Temperature  | °F         | "  | "   | "  |
| Total Dissolved Solids                               | mg/L       | Grab   | "   | "  |
| Hardness   | mg/L       | "  | "   | "  |
| Pollutants <sup>12</sup> listed in<br>Attachment "I" | µg/L       | Grab   | Once during the<br>first <sup>13</sup> 30 minutes of<br>the discharge and<br>annually thereafter;<br>see also Section<br>IV.A.4., and IV.A.5. | See Section I.A.2. & I.A.3.<br>above, of this MRP                            |

<sup>10</sup> Unless it is known that chlorine is not in the discharge.

<sup>11</sup> Not applicable if all wastewater will percolate prior to reaching receiving waters.

<sup>12</sup> For testing organic volatile compounds use EPA Method 8260B and report entire suite of detected constituents.

<sup>13</sup> If the pollutants were monitored at the outset during the application process, the Discharger may submit the analytical results in lieu of the first sampling event.

3. Should any of the weekly, bi-monthly, monthly, quarterly or annual monitoring for a specific constituent show effluent concentrations above the effluent limit, the frequency of monitoring for that constituent shall be increased to weekly or as directed by the Executive Officer. To return to the monitoring frequency specified, the Discharger shall request and receive approval from the Regional Water Board's Executive Officer or designee. (See also Provision VII.C.6.a. of the Order regarding conditions that necessitate termination of the discharge.)
  4. Should the annual monitoring for a specific constituent show effluent concentrations above the values specified in Attachment I, the monitoring frequency for that constituent shall be increased to weekly for one quarter or as directed by the Executive Officer. To return to the monitoring frequency specified, the Discharger shall request and receive approval from the Regional Water Board's Executive Officer or designee. (See also Provision VII.C.6.a. of the Order regarding conditions that necessitate termination of the discharge.)
  5. Should two consecutive annual monitoring results for all the constituents specified in Attachment I show values below those listed in Attachment "I", the Discharger may stop monitoring for the pollutants listed in Attachment I.
  6. If the discharge does not last for more than a day, one composite sample shall be taken for the duration of the discharge and shall be analyzed.
- B.** The following shall constitute the effluent monitoring program for discharges from water treatment plants of decant filter backwash wastewater and/or sludge dewatering filtrate water. If there is no discharge see Section VIII.B.5., below.

**Table 3. Effluent Monitoring Program for Decant Filter Backwash Wastewater And/Or Sludge Dewatering Filtrate Water**

| Parameter                             | Unit | Sample Type | Minimum Sampling Frequency                           | Required Analytical Test Method and Minimum Level, units, respectively |
|---------------------------------------|------|-------------|--|--|
| Flow                                  | gpd  | measured    | Daily  | See Section I.A.3. above, of this MRP                                  |
| Total Residual Chlorine <sup>14</sup> | mg/L | Grab        | During the first 30 minutes of each discharge event, | See Section I.A.3. above, of this MRP                                  |
| Total Suspended Solids <sup>15</sup>  | mg/L | Grab        | During the first 30 minutes of each discharge event  | "  |
| Aluminum                              | µg/L | Grab        | "  | See Section I.A. 3. above, of this MRP; RL is 50 µg/L                  |

<sup>14</sup> Unless it is known that chlorine is not in the discharge.

<sup>15</sup> Not applicable if all wastewater will percolate prior to reach receiving waters.

**Table 3. Effluent Monitoring Program for Decant Filter Backwash Wastewater And/Or Sludge Dewatering Filtrate Water**

| Parameter | Unit | Sample Type | Minimum Sampling Frequency                          | Required Analytical Test Method and Minimum Level, units, respectively |
|-----------|------|-------------|---|--|
| Iron      | µg/L | Grab        | "   | See Section I.A.3. above, of this MRP; RL is 100 µg/L                  |
| Manganese | µg/L | Grab        | During the first 30 minutes of each discharge event | See Section I.A.3. above, of this MRP; RL is 20 µg/L                   |

**V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS – NOT APPLICABLE**

**VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE.**

**VII. RECEIVING WATER MONITORING REQUIREMENTS**

Whenever there is a discharge and the Discharger asserts that there are no surface waters at the point where the discharge reaches the stream, the Discharger shall record on a permanent log the following information: (a) the date(s), time(s), and duration(s) of the discharge; (b) a description of the location where the discharge(s) percolated into the ground, (c) the climatic condition in the area during the discharge and (d) the name of the individual(s) who performed the observation. This information shall be submitted with the required quarterly report.

**VIII. REPORTING REQUIREMENTS**

**A. General Monitoring and Reporting Requirements**

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. All analytical data shall be reported with method detection limit<sup>16</sup> (MDLs) and with identification of either reporting level or limits of quantitation (LOQs).

<sup>16</sup>

*The standardized test procedure to be used to determine the method detection limit (MDL) is given at Appendix B, 'Definition and Procedure for the Determination of the Method Detection Limit' of 40 CFR 136.*

3. Laboratory data for effluent samples must quantify each constituent down to the down to ML specified in Attachment "H" for priority pollutants. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water Board will reject the quantified laboratory data if quality control data are unavailable or unacceptable.
4. Discharge monitoring data shall be submitted in a format acceptable to the Regional Water Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this Order shall be reported to the Regional Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order.
5. The Discharger shall submit to the Regional Water Board reports necessary to determine compliance with effluent limitations in this Order and shall follow the chemical nomenclature and sequential order of priority pollutant constituents shown in Attachment "I" – Priority Pollutant Lists. The Discharger shall report with each sample result:
  - a. The reporting level achieved by the testing laboratory; and
  - b. The laboratory's current MDL, as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007).
6. For non-priority pollutants monitoring, all analytical data shall be reported with identification of method detection limits, as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007).
7. The State or Regional Water Board may notify the Discharger to discontinue submittal of hard copies of reports. When such notification is given, the Discharger shall stop submitting hard copies of required monitoring reports.

**B. Reporting Requirements:**

1. All monitoring reports, or information submitted to the Regional Water Board shall be signed and certified in accordance with 40 CFR 122.22 and shall be submitted under penalty of perjury.
2. All reports shall be arranged in a tabular format to clearly show compliance or noncompliance with each discharge limitation.
3. Five days prior to any discharge from locations already reported, the Discharger shall notify the Regional Board staff by phone or by a fax letter indicating the date and time of the proposed discharge.



4. Five days prior to any planned discharge<sup>17</sup> from locations not yet reported, the discharger shall notify the Regional Board staff by phone or by a fax letter indicating the following:
  - a. Specific type of the proposed wastewater discharge (see listing on Finding 1 of the Order);
  - b. The estimated average and maximum daily flow rates;
  - c. The frequency and duration of the discharge;
  - d. The affected receiving water(s);
  - e. A description of the proposed treatment system (if appropriate); and
  - f. A description of the path from the point of initial discharge to the ultimate location of discharge (fax a map if possible);
5. If no discharge occurs during the previous monitoring period, a letter to that effect shall be submitted in lieu of a monitoring report specified in Table 4, below.
6. Noncompliance Reporting
  - a. The discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided to the Executive Officer (951-782-4130) and the Office of Emergency Services (1-800-852-7550) orally within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
  - b. Any violation of a maximum daily discharge limitation for any of the pollutants listed in this Order shall be included as information that must be reported within 24 hours.
  - c. The Regional Water Board may waive the above required written report on a case-by-case basis.
7. Except for data determined to be confidential under Section 308 of the Clean Water Act (CWA), all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the Regional Water Quality Control Board and the Regional Administrator of EPA. As required by the CWA, effluent data shall not be considered confidential.

<sup>17</sup>

*For those unplanned discharges, as much prior notification as possible is required before any discharge is initiated.*

8. Monitoring reports shall be submitted by the 30th day of each month following the monitoring period and shall include:
  - a. The results of all chemical analyses for the previous month, and annual samples whenever applicable,
  - b. The daily flow data,
  - c. A summary of the month's activities including a report detailing compliance or noncompliance with the task for the specific schedule date, and
  - d. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed which will bring the discharger into full compliance with requirements at the earliest time, and an estimate of the date when the discharger will be in compliance. The discharger shall notify the Regional Water Board by letter when compliance with the time schedule has been achieved.
9. For Dischargers discharging at a volume equal to or greater than 150,000 gallons per day, the Discharger shall submit semi-annual reports that tabulate all measured flows and measured parameters within the most recent six month period. Where discharges associated with these projects last less than 6 months, a report covering the period of discharges shall be submitted. Copies of these monitoring reports shall be submitted to the Regional Water Board and to the Water Quality Director of the Orange County Water District at P.O. Box 8300, Fountain Valley, CA 92728-8300.

### **C. Self Monitoring Reports (SMRs)**

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs in accordance with the requirements described in subsection B.5 below. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. Additionally, the Discharger shall report in the SMR the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C. of this Order. The Discharger shall submit monthly, quarterly, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table 4. Monitoring Periods and Reporting Schedule**

| <b>Sampling Frequency</b> | <b>Monitoring Period Begins On...</b>  | <b>Monitoring Period</b>  | <b>SMR Due Date</b>   |
|---------------------------|--|---|---|
| Continuous                | Day after permit effective date  | All   | 30 <sup>th</sup> day of the month following the sampling month. |
| Hourly                    | Day after permit effective date  | Hourly  | 30 <sup>th</sup> day of the month following the sampling month. |
| Daily                     | Day after permit effective date  | Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of sampling.   | 30 <sup>th</sup> day of the month following the sampling month. |
| Weekly                    | Sunday following permit effective date or on permit effective date if on a Sunday  | Sunday through Saturday   | 30 <sup>th</sup> day of the month following the sampling month. |
| Monthly                   | First day of calendar month following permit effective date or on permit effective date if that date is first day of the month | 1 <sup>st</sup> day of calendar month through last day of calendar month  | 30 <sup>th</sup> day of the month following the sampling month. |
| Quarterly                 | Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date                                    | January 1 through March 31<br>April 1 through June 30<br>July 1 through September 30<br>October 1 through December 31 | April 30<br>July 30<br>October 30<br>January 30                 |
| Semiannually              | Closest of January 1 or July 1 following (or on) permit effective date   | January 1 through June 30<br>July 1 through December 31   | July 30<br>January 30   |
| Annually                  | See Table 1  | See Table 1   | 30 <sup>th</sup> day of the month following the sampling month. |
| Per Discharge Event       | Anytime during the discharge event or as soon as possible after aware of the event   | At a time when sampling can characterize the discharge event  | 30 <sup>th</sup> day of the month following the sampling month. |

**D. Other Reports – Not Applicable**

## ATTACHMENT F – FACT SHEET

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## **ATTACHMENT F – FACT SHEET**

This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of Order No. R8-2009-0003 (hereinafter, this Order).

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Some sections or subsections of this Order have therefore been identified as “not applicable” to this group of Dischargers. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to the Dischargers authorized by this Order.

### **I. PERMIT INFORMATION**

Order No. R8-2003-0061, NPDES No. CAG998001 is a general NPDES permit adopted by the Regional Water Board on August 22, 2003, for discharges to surface waters of various types of wastes that pose an insignificant threat to water quality. Order No. R8-2003-0061, NPDES No. CAG998001 facilitated the processing of permit applications and the early regulation of projects that created de minimus discharges within the Santa Ana Region. Order No. R8-2003-0061 specifically excluded from coverage under its terms and conditions groundwater-related discharges within the San Diego Creek/Newport Bay watershed. This exclusion was due to concern that selenium, nitrogen and potentially other pollutants present in the discharges could result in adverse water quality and beneficial use impacts in the receiving waters.

On March 4, 2005, Order No. R8-2003-0061 was amended by Order No. R8-2005-0041, allowing de minimus discharges within the San Diego Creek/Newport Bay Watershed provided it could be demonstrated that there were no pollutants of concern (e.g., selenium, nitrates and other pollutants for which a TMDL had been adopted) in the discharge.

On January 18, 2006, Order No. R8-2003-0061 was again amended by Order No. R8-2006-0004 to include discharges of decanted backwash filter wastewater and/or sludge dewatering filtrate water from water treatment facilities.

### **II. NOTIFICATION REQUIREMENTS – GENERAL PERMIT APPLICATION**

This Order requires each existing Discharger regulated under the previous Order No. R8-2003-0061 and who requires ongoing regulatory coverage, to submit an updated Notice of Intent form (NOI) to be covered under this Order by April 11, 2009. De minimus discharges for which an NOI is not submitted by April 11, 2009 are not authorized by this Order and must cease, unless the discharges are authorized pursuant to other waste discharge requirements adopted by the Regional Water Board or State Water Resources Control Board.

This Order requires each new Discharger<sup>1</sup> to submit to the Executive Officer an application for the proposed discharge at least 45 days before the start of a new discharge. The application for the proposed discharge will require, at the minimum, the following information:

- A. Notice of Intent to be covered under this Order - see Attachment B of this Order.
- B. For projects involving well development, well purging, groundwater extraction or dewatering, a site characterization study report defining:
  - 1. The proximity of the well(s) to known contaminated sites;
  - 2. The presence of contaminated groundwater onsite;
  - 3. The contaminants and their properties<sup>2</sup>, and;
  - 4. A three dimensional assessment of the extent and concentration of contaminants in the subsurface. The study report shall include a description of the geologic and hydrologic factors that control the migration of the contaminants. It shall also include a list of known or suspected leaking underground tanks and other facilities or operations which have or may have impacted the quality of the underlying groundwater within 200 feet of the site property lines.
- C. A report that shall include the following:
  - 1. A list of constituents and the discharge concentration of each constituent from each point source. For projects involving well development, well purging and groundwater extraction, a representative groundwater sample shall be analyzed using approved test methods for cadmium, chromium VI, copper, lead, mercury, nickel, selenium<sup>3</sup>, silver, zinc, and including total dissolved solids, total inorganic nitrogen, hardness, perchlorate, and organic pollutants<sup>4</sup>. Test results shall be reported with Minimum levels (ML) and method detection limit (MDL);
  - 2. The estimated average and maximum daily flow rates in million gallons per day (mgd), the expected start and end dates of discharge(s), the frequency and duration of the discharge(s);
  - 3. The proposed discharge location(s) and latitude and longitude for each discharge point;
  - 4. A description of the proposed treatment system (if appropriate);
  - 5. The affected receiving water;
  - 6. A map showing the path from the point of initial discharge to the ultimate receiving water. Please try to limit your maps to size of 8.5" X 11".

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<sup>1</sup> "New discharger" refers to those proposing to discharge wastewater under Order No. R8-2009-0003 and not currently covered under Order No. R8-2003-0061.

<sup>2</sup> Properties include boiling point, vapor pressure, vapor density, solubility in water, specific gravity, appearance, odor and pH.

<sup>3</sup> Use modified EPA Method 200.8 using a Dynamic Reaction Cell (DRC) with an ICP-MS and with reporting limit below 1 µg/L.

<sup>4</sup> Using EPA method 8260B.

D. Any other information deemed necessary by the Executive Officer.

### III. INDUSTRY DESCRIPTION

Order No. R8-2003-0061 expired on August 1, 2008 but remains in full force and effect until Order No. 2009-0003 is adopted. To date, 166 Dischargers have been authorized under Order No. R8-2003-0061; of these, 113 are still active. Order No. R8-2003-0061 has facilitated the processing of these permit applications. It is anticipated that most of the currently enrolled Dischargers will be submitting renewal applications for authorization of continued de minimus discharges. The demand for permit issuance will exceed the available staff resources to develop and bring individual tentative waste discharge requirements to the Regional Water Board for adoption. These circumstances necessitate the adoption of this Order (also a general NPDES permit) to expedite the processing of current and anticipated permit applications for de minimus discharges.

#### A. Background

Order No. R8-2003-0061 regulated wastewater discharges to surface waters of various types of wastes that pose an insignificant threat to water quality, defined as de minimus discharges, in the Santa Ana Region. The types of discharges regulated under that Order included:

1. Construction dewatering wastes; (except stormwater dewatering at construction sites)<sup>5</sup>
2. Wastes associated with well installation, development, test pumping and purging;
3. Aquifer testing wastes;
4. Dewatering wastes from subterranean seepage, except for discharges from utility vaults;
5. Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
6. Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
7. Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
8. Discharges from potable water supply systems resulting from initial system startup, routine startup, sampling of influent flow, system failures, pressure releases, etc.;
9. Discharges from fire hydrant testing or flushing;
10. Non-contact cooling water;
11. Air conditioning condensate;
12. Swimming pool discharge;

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<sup>5</sup> Stormwater discharges were regulated under either the State's General Construction Activity permit or under the applicable county Municipal Storm Sewer System permit



13. Discharges resulting from diverted stream flows;
14. Decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities, and
15. Other similar types of wastes that pose a de minimus threat to water quality yet technically must be regulated under waste discharge requirements

## **B. Revised Regulatory Approach**

This Order takes a different approach from Order No. R8-2003-0061 in regulating certain types of discharges. The following lists the proposed changes and the rationale for them:

1. Discharges of the types listed in III.A.1., III.A.4. through III.A.9., and III.A.11. through III.A.13. to municipal separate storm sewer systems (MS4) from MS4 permittee activities within the Region will be regulated under this Order until the MS4 permits adopted by the Regional Water Board for the municipalities, cities and counties within the Region are re-issued with applicable terms and conditions necessary to address the regulation of these discharges. Reissuance of the permits is expected in early-mid 2009. Upon the adoption of MS4 permits that contain appropriate permit provisions, discharges of these types to the MS4 by the MS4 permittees will be regulated under the MS4 permits. Similarly, other waste discharge requirements issued by the Regional Water Board may be amended, as appropriate, in the future to address this de minimus discharges and thereby eliminate the need for coverage under this Order.

**Rationale:** These De minimus discharges, which in many cases consist of potable water, are or can be regulated under the area-wide MS4 permits or other waste discharge requirements. This approach streamlines the regulatory process for these dischargers. Where these discharges are to waters of the U.S. and not to the MS4, the discharges may continue to be regulated under this Order.

In all cases, the Regional Water Board retains the authority to issue separate waste discharge requirements for discharges of these types that, based on case-specific circumstances, are determined to have the potential for adverse water quality and/or beneficial use impacts.

2. Item III.A.10. - Non-contact cooling water<sup>6</sup> will no longer be regulated under this general permit. Open recirculating non-contact cooling water systems<sup>7</sup> are subject to metal corrosion, scale formation, and biological fouling, all of which can have a direct effect on system operating efficiency, reliability, longevity, and composition of the bleedoff sent to the drain. Chemical treatment products, such as tributyltin containing compounds, additives containing copper, zinc, hexavalent chromium and other organo-metallic compounds, are commonly used in the cooling water systems to address these problems. The constituents in these additives are or may be highly toxic to aquatic organisms and must be removed through additional treatment prior to discharge. Thus, non-contact cooling water discharges cannot be considered an insignificant threat to water quality and require regulation under separate waste discharge requirements. As a matter of information, no non-contact cooling water discharges have been authorized to be discharged under Order No. R8-2003-0061 or prior general de minimus orders adopted by the Regional Water Board.

### **C. Wastewater Treatment**

The most common treatment required for de minimus discharges is settling and/or dechlorination. Settling is used for those discharges with high settleable solids concentration. Discharges with residual chlorine, such as wastewater from hydro-testing of pipes and storage tanks, swimming pool drainage, and development and purging of wells, must be dechlorinated, unless the concentration is depleted by natural processes prior to mixing with the receiving water. If dechlorination is not accomplished naturally, the most common method of dechlorination is with the use of chemicals.

Those discharges with high concentrations of total dissolved solids, total inorganic nitrogen, selenium, phosphorous, and/or perchlorate may require advanced forms of treatment and may need to be covered under individual permits. Unless otherwise determined based on pollutant and/or site-specific circumstances, where wastewater discharges contain pollutant concentrations lower than established objectives, EPA priority pollutant water quality criteria, and/or maximum contaminant levels(MCLs) for drinking water, wastewater may be discharged without treatment as they pose no reasonable potential to affect the water quality or beneficial uses of receiving waters.

### **D. Discharge Points and Receiving Waters**

This Order authorizes permitted discharges to inland surface waters, estuarine, and ocean waters within the Santa Ana Region. In some cases, the de minimus discharges addressed by this Order are to storm drains or creeks that are typically dry in the summer. In these cases, the wastewater discharges percolate into the underlying groundwater management zones without reaching flowing surface water. During wet seasons, wastewater discharges are most oftentimes into flowing surface water. The beneficial uses of these receiving waters are described in Section IV.C.1., below.

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<sup>6</sup> See Attachment A for definitions.

<sup>7</sup> See Attachment A for definitions.

### **E. Excluded Discharges:**

The following discharges are excluded from being regulated under this Order:

1. Wastewater with pollutants of concern for which no effluent limitations are specified in this Order.
2. Wastewater discharges from hydro-testing of contaminated pipes or contaminated vessels or tanks.
3. Wastewater discharges from draining of decorative ponds, golf course lakes and ponded water (irrigation tailwater that may commingle with stormwater), unless full characterization of the wastewater for the presence of pesticides, priority pollutants, insecticides, biocides and/or other chemicals that may have been applied to the wastewater is provided. There must be a demonstration that there are no pollutants present at levels of concern.

### **F. Compliance Summary - Not Applicable**

### **G. Planned Changes - Not Applicable**

## **IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

The requirements contained in this Order are based on the requirements and authorities described in this section.

### **A. Legal Authorities**

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and its implementing regulations adopted by the USEPA, and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for the point source discharges described herein to inland surface waters, estuarine, and ocean waters within the Santa Ana Region. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).

Pursuant to NPDES regulations at 40 CFR 122.28, States may request authority to issue general NPDES permits. On June 8, 1989, the State Water Board applied to the USEPA requesting revisions to its NPDES Program in accordance with 40 CFR 122.28, 123.62, and 403.10, including a request to add general permit authority to its approved NPDES Program. On September 22, 1989, the USEPA, Region 9, approved the State Water Board's request, granting authorization for the State to issue general NPDES permits.

Pursuant to NPDES regulations at 40 CFR 122.28 (a) (2) general permits may be regulate point source discharges that:

1. Involve the same or substantially similar types of operations,
2. Discharge the same types of wastes,
3. Require the same effluent limitations,
4. Require the same or similar monitoring, and
5. In the opinion of the Executive Officer, are more appropriately controlled under a general permit than under individual permits.

## **B. California Environmental Quality Act (CEQA)**

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code section 21000 et seq. (*County of Los Angeles v. California State Water Resources Control Board* (2006) 143 Cal.App.4th 985, mod. (Nov. 6, 2006, B184034) 50 Cal.Rptr.3d 619, 632-636.).

## **C. State and Federal Regulations, Policies, and Plans**

1. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Santa Ana Basin (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 (Sources of Drinking Water Policy) requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic water supply use to water bodies.

On January 22, 2004, the Regional Water Board adopted Resolution No. R8-2004-0001, amending the Basin Plan to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. The State Water Resources Control Board and Office of Administrative Law (OAL) approved the N/TDS Amendment on September 30, 2004 and December 23, 2004, respectively. EPA approved the surface water standards components of the N/TDS Amendment on June 20, 2007.

The existing and potential beneficial uses of surface waters in the Santa Ana Region are designated in Chapter 3 of the Basin Plan and may include:

- a. Municipal and Domestic Supply,
- b. Agricultural Supply,
- c. Industrial Service Supply,
- d. Industrial Process Supply,
- e. Groundwater Recharge,
- f. Hydropower Generation,
- g. Water Contact Recreation,
- h. Non-contact Water Recreation
- i. Warm Freshwater Habitat,
- j. Limited Warm Freshwater Habitat,

- k. Cold Freshwater Habitat,
- l. Preservation of Biological Habitats of Special Significance,
- m. Wildlife Habitat,
- n. Marine Habitat,
- o. Shellfish Harvesting,
- p. Estuarine Habitat,
- q. Rare, Threatened or Endangered Species, and
- r. Spawning, Reproduction, and Development.

Many surface waters within the region recharge underlying groundwater basins. The existing and potential beneficial uses of groundwater within the Santa Ana Region are designated in Chapter 3 of the Basin Plan and generally include:

- a. Municipal and Domestic Supply,
- b. Agricultural Supply,
- c. Industrial Service Supply, and
- d. Industrial Process Supply

The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (the Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters of the State.

This Order implements applicable provisions of the Basin Plan and the Thermal Plan, as well as the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP)(see 3., below).

- 2. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. Approximately forty water quality criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR, which established new criteria for toxics in the State and incorporated the previously adopted criteria of the NTR. The CTR was amended on February 13, 2001. The NTR and CTR contain water quality criteria for priority toxic pollutants applicable to inland surface waters, enclosed bays, and estuaries of the State.

- 3. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for toxicity control. Requirements of this Order implement the SIP.
- 4. Alaska Rule.** On March 30, 2000, at 40 CFR 131.32, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. [65 Fed. Reg. 24641 (April 27, 2000)] Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA before May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- 5. Antidegradation Policy.** NPDES regulations require that State water quality standards include an antidegradation policy consistent with the federal policy established at 40 CFR 131.12. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Basin Plan implements and incorporates by reference both the state and federal antidegradation policies. The discharges authorized under this Order are expected to have an insignificant effect on water quality and beneficial uses and therefore conform to applicable antidegradation provisions of NPDES regulations at 40 CFR 131.12 and with State Water Board Resolution No. 68-16.
- 6. Anti-Backsliding Requirements.** CWA Sections 402 (o) (2) and 303 (d) (4) and NPDES regulations at 40 CFR 122.44 (l) prohibit backsliding in NPDES permits; i.e., effluent limitations in a reissued permit must be at least as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. This Order/General Permit is consistent with applicable anti-backsliding requirements. The limitations in this Order are not less stringent than those in the prior Orders/General Permits.

#### **D. Impaired Water Bodies on CWA 303(d) List/TMDLs**

Section 303(d) of the CWA requires states to identify water bodies where water quality standards are not expected to be met after technology-based effluent limitations have been implemented for point sources. For all 303(d)-listed water bodies and pollutants, the Regional Water Board has developed and/or plans to develop total maximum daily loads (TMDLs) that specify waste load allocations (WLA) for point sources and load allocations (LA) for non-point sources. These allocations form the basis, in part, for limitations in waste discharge requirements.

Since discharges will be regulated by this general permit only when they are determined to pose an insignificant threat to water quality, the discharges will not affect either the 303(d) listed bodies of water or TMDLs that have been or will be established to address identified impairments.

#### **E. Other Plans, Policies and Regulations**

In most areas of the watershed, there is no significant amount of receiving water at the point of discharge. Therefore, no mixing zone allowance is included in the calculation of effluent limits. Consequently, compliance with the effluent limits is required to be determined at the end of the discharge pipe or at a location prior to where the discharge enters the receiving water.

### **V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source Dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs may be established: (1) using USEPA criteria guidance under CWA section 304 (a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

## **A. Discharge Prohibitions**

The discharge prohibitions are based on the Federal Clean Water Act, Basin Plan, State Water Resources Control Board's plans and policies, U.S. Environmental Protection Agency guidance and regulations, and previous permit Orders No. R8-2003-0061 provisions, and are consistent with the requirements set for other discharges regulated by NPDES permits adopted by the Regional Water Board.

## **B. Technology-Based Effluent Limitations**

### **1. Scope and Authority**

CWA Section 301 (b) and NPDES regulations at 40 CFR 122.44 require permits to, at a minimum, meet applicable technology-based requirements and any more stringent effluent limitations necessary to meet applicable water quality standards. The CWA requires the USEPA to develop effluent limitations, guidelines and standards (Effluent Limitations Guidelines - ELGs) representing application of best practicable treatment control technology (BPT), best available technology economically achievable (BAT), best conventional pollutant control technology (BCT), and best available demonstrated control technology for new sources (NSPS), for specific industrial categories. Where USEPA has not yet developed ELGs for a particular industry or a particular pollutant, Section 402 (a) (1) of the CWA and USEPA regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 CFR 125.3.

### **2. Applicable Technology-Based Effluent Limitations**

This Order does not establish technology-based effluent limitations.

## **C. Water Quality-Based Effluent Limitations (WQBELs)**

### **1. Scope and Authority**

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.



Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

## **2. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

The Order authorizes certain discharges to surface waters within the Santa Ana Region. Beneficial uses of these receiving waters, as designated by the Basin Plan (Chapter 3) are described in Section IV.C.1, Findings, of this Order.

- a. The Basin Plan (Chapter 4) specifies narrative and numeric water quality objectives applicable to surface water as follows.

TDS and TIN: TDS and TIN limitations are specified in the Order for discharges to surface waters. The proposed TDS/TIN limits for direct discharges into surface waters within the Santa Ana Region are based on the objectives specified in Table 4-1 of the Basin Plan, as amended.

In accordance with 40 CFR Section 122.45(d), there may be instances in which the basis for a limit for a particular continuous discharge may be impracticable to be stated as a maximum daily, average weekly, or average monthly effluent limitation. The Regional Water Board has determined that it is not practicable to express TDS and TIN effluent limitations as average weekly and average monthly effluent limitations because the TDS and TIN objectives in the Basin Plan were established to protect the underlying groundwater. Consequently, a 12-month average period is more appropriate.

## **3. Determining the Need for WQBELs**

NPDES regulations at 40 CFR 122.44(d)(1)(i) require permits to include WQBELs for all pollutants (non-priority or priority) "which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any narrative or numeric criteria within a State water quality standard" (have Reasonable Potential). Thus, assessing whether a pollutant has Reasonable Potential is the fundamental step in determining whether or not a WQBEL is required.

#### **4. WQBEL Calculations**

No mixing zone allowance is included in the calculation of effluent limits in this Order and, consequently, compliance with the effluent limits is required to be determined at the end of the discharge pipe for freshwater discharge. If a Discharger requests that a mixing zone allowance be included in the determination of appropriate effluent limits, a dilution model must be provided for approval.

#### **5. Whole Effluent Toxicity (WET)-Not Applicable**

#### **D. Best Professional Judgment-Based Effluent Limitations**

This Order includes effluent limitations for total petroleum hydrocarbons, suspended solids, sulfides, and oil and grease that are based on best professional judgment. The limitations were established when the first general de minimus permit Order No. 93-49 was adopted by the Regional Water Board in 1993.

For filter backwash wastewater discharges, the proposed maximum daily effluent total suspended solids limit is 30 mg/L and is based on best professional judgment.

#### **E. Discharge Specifications**

Discharge Limitations established by this Order require authorized Dischargers to compare effluent data, generated through routine monitoring, to effluent limitations. Exceedance of any of the specified effluent limitations may trigger mandatory minimum penalties, accelerated monitoring for certain constituents and may lead to discontinuance of coverage under this General Permit. The Discharge Specifications impose specific effluent limitations to assure that authorized discharges are not creating adverse impacts on receiving water quality. When adverse impacts are identified following exceedance of effluent limitation(s), and/or violation of discharge prohibitions and provisions, Dischargers are either directed to mitigate impacts, to sewer or stop the discharge and/or to seek coverage under an individual NPDES permit.

#### **F. Final Effluent Limitations**

##### **1. Satisfaction of Anti-Backsliding Requirements**

All effluent limitations in this Order are the same as the effluent limitations in Order No. R8-2003-0061. Consequently, this Order conforms with anti-backsliding requirements.

## 2. Satisfaction of Antidegradation Policy

Discharges in conformance with the requirements of this Order will not result in a lowering of water quality and therefore conform to antidegradation requirements specified in Resolution No. 68-16, which incorporates the federal antidegradation policy at 40 CFR 131.12 where, as here, it is applicable.

## 3. Stringency of Requirements for Individual Pollutants

Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Apart from certain standards changes resulting from the N/TDS Basin Plan amendment, all beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to section 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

**Table 1. Effluent Limitations Applicable to All Receiving Waters**

| Constituent                          | Maximum Daily Concentration Limit (mg/l)        |
|--------------------------------------|---|
| Total Dissolved Solids (TDS)         | Table 4-1 of the Basin Plan for Santa Ana River |
| Total Inorganic Nitrogen (TIN)       | Table 4-1 of the Basin Plan for Santa Ana River |
| Total Petroleum Hydrocarbons         | 0.1 mg/L  |
| Total Residual Chlorine <sup>8</sup> | 0.1 mg/L  |
| Suspended Solids                     | 75 mg/L   |
| Sulfides                             | 0.4 mg/L  |
| Oil and Grease                       | 15 mg/L   |

Filter backwash wastewater shall meet a maximum total suspended solids daily limit of 30 mg/L.

### **F. Interim Effluent Limitations – Not Applicable**

### **G. Land Discharge Specifications – Not Applicable**

### **H. Reclamation Specifications – Not Applicable**

## **VI. RATIONALE FOR RECEIVING WATER LIMITATIONS**

### **A. Surface Water**

The surface water receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan and are a required part of this Order.

### **B. Groundwater**

The receiving groundwater limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan.

## **VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Water Boards to require technical and monitoring reports. The MRP, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

The principal purposes of a monitoring program by a Discharger are to:

1. Document compliance with waste discharge requirements and prohibitions established by the Regional Water Board,
2. Facilitate self-policing by the Discharger in the prevention and abatement of pollution arising from waste discharge,
3. Develop or assist in the development of limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and to
4. Prepare water and wastewater quality inventories.

The MRP is a standard requirement in almost all NPDES permits issued by the Regional Water Board, including this Order. It contains definitions of terms, specifies general sampling and analytical protocols, and sets out requirements for reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations and the California Water Code.

Monitoring is the primary means of ensuring that waste discharge requirements are met. It is also the basis for enforcement actions against Dischargers who are in violation of the waste discharge requirements issued by the Regional Water Board. All Dischargers enrolled under this general permit will be required to conduct monitoring in accordance with a monitoring program issued by the Executive Officer. Each monitoring and reporting program will be customized for each enrollee based on the characteristics of the groundwater being treated and discharged. The typical required constituents and frequency of analyses are tabulated in the self-monitoring program attached to this general

permit as "Attachment E." This monitoring and reporting program will be revised as appropriate. An increase of the parameters or frequency of monitoring will be required when monitoring data show the presence of petroleum hydrocarbons that are not limited in this Order, or toxicity test failures. A reduction of the parameters or frequency of monitoring may be implemented with prior approval of the Executive Officer when monitoring data demonstrate that such reduction is warranted.

In addition, the monitoring program includes analyses for additional constituents to determine the overall impact of individual discharges and to screen for unexpected contaminants.

Specifically for filter backwash wastewater discharges, the proposed Order requires monitoring for iron, manganese and aluminum for those water treatment facilities that have the potential for discharging such constituents.

#### **A. Influent Monitoring – Not Applicable**

#### **B. Effluent Monitoring**

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions and to allow ongoing characterization of discharges to determine potential adverse impacts and to determine continued suitability for coverage under the General Permit. Monitoring requirements are given in the proposed monitoring and reporting program (Attachment E). This provision requires compliance with the monitoring and reporting program, and is based on 40 CFR 122.44(i), 122.62, 122.63 and 124.5. The self monitoring program (SMP) is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board's policies. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

In addition to discharge rate, effluent is monitored for hardness, pH, total suspended and total dissolved solids. Annual monitoring for the full priority pollutants is no longer required since reported priority pollutant monitoring data show absence of most of the pollutants. However, annual monitoring is required for certain pollutants which have been determined to have high probability of being present in the discharges, though typically at insignificant concentrations. These pollutants are listed in Attachment I, "Trigger Table". This list was determined from evaluating monitoring data from facilities regulated under the de minimus permit and the groundwater cleanup general permit Order Nos. R8-2003-0061 and R8-2007-0008, respectively.

#### **C. Whole Effluent Toxicity Testing Requirements – Not Applicable**

#### **D. Receiving Water Monitoring - Not Applicable**

The MRP does not require characterization of receiving waters because the discharges are not expected to have an insignificant impact on water quality.

#### **E. Other Monitoring Requirements - Not Applicable**

### **VIII. RATIONALE FOR PROVISIONS**

#### **A. Standard Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in this Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

#### **B. Special Provisions**

##### **1. Reopener Provisions**

This provision is based on 40 CFR Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, or adoption of new regulations by the State Board or Regional Water Board, including revisions to the Basin Plan.

##### **2. Special Studies and Additional Monitoring Requirements – Not Applicable**

##### **3. Best Management Practices and Pollution Prevention – Not Applicable**

##### **4. Construction, Operation, and Maintenance Specifications – Not Applicable**

##### **5. Special Provisions for Municipal Facilities - Not Applicable**

## **6. Other Special Provisions**

- a. In some instances, Dischargers have continued to discharge wastewater that does not comply with effluent limitations and/or exceeds concentration values for one or more of the constituents listed in Attachment I. To address this, the monitoring program (Attachment E) requires accelerated monitoring of constituents that are detected at concentrations that are greater than applicable effluent limits and/or above the pollutant values listed in Attachment I. If the results of two consecutive monitoring samples collected pursuant to the accelerated monitoring program exceed effluent limits and/or greater than the pollutant values listed in Attachment I, and/or equal or exceed the maximum contaminant level (MCL) or Reporting Level values listed in the Attachment I, the Order requires the Discharger to cease discharging (see Provision VII.C.6.a. of the Order). In this event, the Order also requires the Discharger to notify the Regional Water Board to determine a further course of action. Alternatives may include sewerage the discharge or regulating the discharge under an individual permit or under a different general permit that addresses the type of pollutant(s) encountered at the site.

## **7. Compliance Schedules – Not Applicable**

## **IX. PUBLIC PARTICIPATION**

The California Regional Water Quality Control Board, Santa Ana Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) general permit for discharges to surface waters that pose an insignificant (de minimus) threat to water quality within the Santa Ana Region. The Regional Water Board encourages public participation in the WDR adoption process.

### **A. Notification of Interested Parties**

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the posting of Notice of Public Hearing at the Regional Water Board website:

[http://www.waterboards.ca.gov/santaana/board\\_decisions/tentative\\_orders/index.shtml](http://www.waterboards.ca.gov/santaana/board_decisions/tentative_orders/index.shtml)  
on December 24, 2008 and publication in the Orange County Register, The Sun, and The Press Enterprise on December 19, 2008.

## **B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on March 9, 2009 to:

Jane Qiu  
California Regional Water Quality Control Board  
Santa Ana Region  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

## **C. Public Hearing**

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: March 27, 2009  
Time: 9:00 A.M.  
Location: City Council Chambers of Loma Linda  
25541 Barton Road  
City of Loma Linda, CA

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address <http://www.waterboards.ca.gov/santaana> where you can access the current agenda for changes in dates and locations.



#### **D. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

#### **E. Information and Copying**

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 9:00 a.m. and 3:00 p.m. Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (951) 782-4130.

#### **F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

#### **G. Additional Information**

Requests for additional information or questions regarding this Order should be directed to Jane Qiu at (951) 320-2008.

## ATTACHMENT H – MINIMUM LEVELS

### MINIMUM LEVELS IN PPB (µg/l)

| Table 1- VOLATILE SUBSTANCES <sup>1</sup>     | GC  | GCMS |
|---|-----|------|
| Acrolein                                      | 2.0 | 5    |
| Acrylonitrile                                 | 2.0 | 2    |
| Benzene                                       | 0.5 | 2    |
| Bromoform                                     | 0.5 | 2    |
| Carbon Tetrachloride                          | 0.5 | 2    |
| Chlorobenzene                                 | 0.5 | 2    |
| Chlorodibromomethane                          | 0.5 | 2    |
| Chloroethane                                  | 0.5 | 2    |
| Chloroform                                    | 0.5 | 2    |
| Dichlorobromomethane                          | 0.5 | 2    |
| 1,1 Dichloroethane                            | 0.5 | 1    |
| 1,2 Dichloroethane                            | 0.5 | 2    |
| 1,1 Dichloroethylene                          | 0.5 | 2    |
| 1,2 Dichloropropane                           | 0.5 | 1    |
| 1,3 Dichloropropylene (volatile)              | 0.5 | 2    |
| Ethylbenzene                                  | 0.5 | 2    |
| Methyl Bromide ( <i>Bromomethane</i> )        | 1.0 | 2    |
| Methyl Chloride ( <i>Chloromethane</i> )      | 0.5 | 2    |
| Methylene Chloride ( <i>Dichloromethane</i> ) | 0.5 | 2    |
| 1,1,2,2 Tetrachloroethane                     | 0.5 | 1    |
| Tetrachloroethylene                           | 0.5 | 2    |
| Toluene                                       | 0.5 | 2    |
| trans-1,2 Dichloroethylene                    | 0.5 | 1    |
| 1,1,1 Trichloroethane                         | 0.5 | 2    |
| 1,1,2 Trichloroethane                         | 0.5 | 2    |
| Trichloroethylene                             | 0.5 | 2    |
| Vinyl Chloride                                | 0.5 | 2    |
| 1,2 Dichlorobenzene (volatile)                | 0.5 | 2    |
| 1,3 Dichlorobenzene (volatile)                | 0.5 | 2    |
| 1,4 Dichlorobenzene (volatile)                | 0.5 | 2    |

### Selection and Use of Appropriate ML Value:

ML Selection: When there is more than one ML value for a given substance, the discharger may select any one of those ML values, and their associated analytical methods, listed in this Attachment that are below the calculated effluent limitation for compliance determination. If no ML value is below the effluent limitation, then the discharger shall select the lowest ML value, and its associated analytical method, listed in the PQL Table.

ML Usage: The ML value in this Attachment represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. Assuming that all method-specific analytical steps are followed, the ML value will also represent, after the appropriate application of method-specific factors, the lowest standard in the calibration curve for that specific analytical technique. Common analytical practices sometimes require different treatment of the sample relative to calibration standards.

Note: chemical names in parenthesis and italicized is another name for the constituent.

<sup>1</sup> The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

## MINIMUM LEVELS IN PPB (µg/l)

| <b>Table 2 – Semi-Volatile Substances<sup>2</sup></b> | <b>GC</b> | <b>GCMS</b> | <b>LC</b> |
|---|-----------|-------------|-----------|
| 2-Chloroethyl vinyl ether                             | 1         | 1           |           |
| 2 Chlorophenol  | 2         | 5           |           |
| 2,4 Dichlorophenol                                    | 1         | 5           |           |
| 2,4 Dimethylphenol                                    | 1         | 2           |           |
| 4,6 Dinitro-2-methylphenol                            | 10        | 5           |           |
| 2,4 Dinitrophenol                                     | 5         | 5           |           |
| 2- Nitrophenol  |           | 10          |           |
| 4- Nitrophenol  | 5         | 10          |           |
| 4 Chloro-3-methylphenol                               | 5         | 1           |           |
| 2,4,6 Trichlorophenol                                 | 10        | 10          |           |
| Acenaphthene  | 1         | 1           | 0.5       |
| Acenaphthylene  |           | 10          | 0.2       |
| Anthracene  |           | 10          | 2         |
| Benzidine   |           | 5           |           |
| Benzo (a) Anthracene (1,2 Benzanthracene)             | 10        | 5           |           |
| Benzo(a) pyrene (3,4 Benzopyrene)                     |           | 10          | 2         |
| Benzo (b) Fluoranthene (3,4 Benzofluoranthene)        |           | 10          | 10        |
| Benzo(g,h,i)perylene                                  |           | 5           | 0.1       |
| Benzo(k)fluoranthene                                  |           | 10          | 2         |
| bis 2-(1-Chloroethoxyl) methane                       |           | 5           |           |
| bis(2-chloroethyl) ether                              | 10        | 1           |           |
| bis(2-Chloroisopropyl) ether                          | 10        | 2           |           |
| bis(2-Ethylhexyl) phthalate                           | 10        | 5           |           |
| 4-Bromophenyl phenyl ether                            | 10        | 5           |           |
| Butyl benzyl phthalate                                | 10        | 10          |           |
| 2-Chloronaphthalene                                   |           | 10          |           |
| 4-Chlorophenyl phenyl ether                           |           | 5           |           |
| Chrysene  |           | 10          | 5         |
| Dibenzo(a,h)-anthracene                               |           | 10          | 0.1       |
| 1,2 Dichlorobenzene (semivolatile)                    | 2         | 2           |           |
| 1,3 Dichlorobenzene (semivolatile)                    | 2         | 1           |           |
| 1,4 Dichlorobenzene (semivolatile)                    | 2         | 1           |           |
| 3,3' Dichlorobenzidine                                |           | 5           |           |
| Diethyl phthalate                                     | 10        | 2           |           |
| Dimethyl phthalate                                    | 10        | 2           |           |
| di-n-Butyl phthalate                                  |           | 10          |           |
| 2,4 Dinitrotoluene                                    | 10        | 5           |           |
| 2,6 Dinitrotoluene                                    |           | 5           |           |
| di-n-Octyl phthalate                                  |           | 10          |           |
| 1,2 Diphenylhydrazine                                 |           | 1           |           |
| Fluoranthene  | 10        | 1           | 0.05      |
| Fluorene  |           | 10          | 0.1       |
| Hexachloro-cyclopentadiene                            | 5         | 5           |           |
| 1,2,4 Trichlorobenzene                                | 1         | 5           |           |

## MINIMUM LEVELS IN PPB (µg/l)

| <b>Table 2 - SEMI-VOLATILE SUBSTANCES<sup>2</sup></b> | <b>GC</b> | <b>GCMS</b> | <b>LC</b> | <b>COLOR</b> |
|---|-----------|-------------|-----------|--------------|
| Pentachlorophenol                                     | 1         | 5           |           |              |
| Phenol <sup>3</sup>                                   | 1         | 1           |           | 50           |
| Hexachlorobenzene                                     | 5         | 1           |           |              |
| Hexachlorobutadiene                                   | 5         | 1           |           |              |
| Hexachloroethane                                      | 5         | 1           |           |              |
| Indeno(1,2,3,cd)-pyrene                               |           | 10          | 0.05      |              |
| Isophorone  | 10        | 1           |           |              |
| Naphthalene   | 10        | 1           | 0.2       |              |
| Nitrobenzene  | 10        | 1           |           |              |
| N-Nitroso-dimethyl amine                              | 10        | 5           |           |              |
| N-Nitroso -di n-propyl amine                          | 10        | 5           |           |              |
| N-Nitroso diphenyl amine                              | 10        | 1           |           |              |
| Phenanthrene  |           | 5           | 0.05      |              |
| Pyrene  |           | 10          | 0.05      |              |

| <b>Table 3–<br/>INORGANICS<sup>4</sup></b> | <b>FAA</b> | <b>GFAA</b> | <b>ICP</b> | <b>ICPMS</b> | <b>SPGFAA</b> | <b>HYDRIDE</b> | <b>CVAA</b> | <b>COLOR</b> | <b>DCP</b> |
|--|------------|-------------|------------|--------------|---------------|----------------|-------------|--------------|------------|
| Antimony                                   | 10         | 5           | 50         | 0.5          | 5             | 0.5            |             |              | 1000       |
| Arsenic                                    |            | 2           | 10         | 2            | 2             | 1              |             | 20           | 1000       |
| Beryllium                                  | 20         | 0.5         | 2          | 0.5          | 1             |                |             |              | 1000       |
| Cadmium                                    | 10         | 0.5         | 10         | 0.25         | 0.5           |                |             |              | 1000       |
| Chromium (total)                           | 50         | 2           | 10         | 0.5          | 1             |                |             |              | 1000       |
| Chromium VI                                | 5          |             |            |              |               |                |             | 10           |            |
| Copper                                     | 25         | 5           | 10         | 0.5          | 2             |                |             |              | 1000       |
| Lead                                       | 20         | 5           | 5          | 0.5          | 2             |                |             |              | 10000      |
| Mercury                                    |            |             |            | 0.5          |               |                | 0.2         |              |            |
| Nickel                                     | 50         | 5           | 20         | 1            | 5             |                |             |              | 1000       |
| Selenium                                   |            | 5           | 10         | 2            | 5             | 1              |             |              | 1000       |
| Silver                                     | 10         | 1           | 10         | 0.25         | 2             |                |             |              | 1000       |
| Thallium                                   | 10         | 2           | 10         | 1            | 5             |                |             |              | 1000       |
| Zinc                                       | 20         |             | 20         | 1            | 10            |                |             |              | 1000       |
| Cyanide                                    |            |             |            |              |               |                |             | 5            |            |

<sup>2</sup> With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standards concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.

<sup>3</sup> Phenol by colorimetric technique has a factor of 1.

<sup>4</sup> The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

**MINIMUM LEVELS IN PPB (µg/l)**

| <b>Table 4- PESTICIDES – PCBs<sup>5</sup></b>                  | <b>GC</b> |
|--|-----------|
| Aldrin   | 0.005     |
| alpha-BHC ( <i>a</i> -Hexachloro-cyclohexane)                  | 0.01      |
| beta-BHC ( <i>b</i> -Hexachloro-cyclohexane)                   | 0.005     |
| Gamma-BHC ( <i>Lindane</i> ; <i>g</i> -Hexachloro-cyclohexane) | 0.02      |
| Delta-BHC ( <i>d</i> -Hexachloro-cyclohexane)                  | 0.005     |
| Chlordane  | 0.1       |
| 4,4'-DDT   | 0.01      |
| 4,4'-DDE   | 0.05      |
| 4,4'-DDD   | 0.05      |
| Dieldrin   | 0.01      |
| Alpha-Endosulfan   | 0.02      |
| Beta-Endosulfan  | 0.01      |
| Endosulfan Sulfate   | 0.05      |
| Endrin   | 0.01      |
| Endrin Aldehyde  | 0.01      |
| Heptachlor   | 0.01      |
| Heptachlor Epoxide   | 0.01      |
| PCB 1016   | 0.5       |
| PCB 1221   | 0.5       |
| PCB 1232   | 0.5       |
| PCB 1242   | 0.5       |
| PCB 1248   | 0.5       |
| PCB 1254   | 0.5       |
| PCB 1260   | 0.5       |
| Toxaphene  | 0.5       |

Techniques:

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR - Colorimetric

<sup>5</sup>

*The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.*

## ATTACHMENT I –TRIGGERS FOR POLLUTANT MONITORING

**Table 1. Criteria for Discharges to Freshwater Not Designated MUN**

|    | CONSTITUENT                               | µg/L                      |  |    | CONSTITUENT                                      | µg/L                |
|----|---|---------------------------|--|----|--|---------------------|
| 1  | <b><i>Antimony</i></b>                    | <b>6</b>                  |  | 24 | <b><i>Dibromochloropropane (DBCP)</i></b>        | <b><u>0.2</u></b>   |
| 2  | <b><i>Arsenic</i></b>                     | <b>50</b>                 |  | 25 | Dichlorobromomethane                             | 46                  |
| 3  | Cadmium                                   | See Table 5<br>or 6 below |  | 26 | <b><i>Ethylbenzene</i></b>                       | <b>300</b>          |
| 4  | Chromium III                              | "                         |  | 27 | <b><i>Methyl Isobutyl Ketone</i></b>             | <b><u>120</u></b>   |
| 5  | Chromium VI                               | 11                        |  | 28 | <b><i>Methyl Tertiary Butyl Ether (MTBE)</i></b> | <b>13</b>           |
| 6  | Copper                                    | See Table 5<br>or 6 below |  | 29 | <b><i>Naphthalene</i></b>                        | <b><u>17</u></b>    |
| 7  | Lead                                      | "                         |  | 30 | Perchlorate                                      | 4                   |
| 8  | Mercury                                   | 0.051                     |  | 31 | <b><i>Tert Butyl Alcohol (TBA)</i></b>           | <b><u>12</u></b>    |
| 9  | Nickel                                    | See Table 5<br>or 6 below |  | 32 | <b><i>Tetrachloroethylene (PCE)</i></b>          | <b>5</b>            |
| 10 | Selenium                                  | 5.0                       |  | 33 | <b><i>Toluene</i></b>                            | <b>150</b>          |
| 11 | Silver                                    | See Table 5<br>or 6 below |  | 34 | <b><i>Trichloroethylene (TCE)</i></b>            | <b>5</b>            |
| 12 | <b><i>Thallium</i></b>                    | <b>2</b>                  |  | 35 | <b><i>Vinyl Chloride</i></b>                     | <b>0.5</b>          |
| 13 | Zinc                                      | See Table 5<br>or 6 below |  | 36 | <b><i>1,2,3-Trichloropropane (1,2,3-TCP)</i></b> | <b><u>0.005</u></b> |
| 14 | Cyanide                                   | 5.2                       |  | 37 | <b><i>1,3-Dichloropropylene</i></b>              | <b>0.5</b>          |
| 15 | <b><i>1,1,2-Trichloroethane</i></b>       | <b>5</b>                  |  | 38 | <b><i>1,1,2,2-Tetrachloroethane</i></b>          | <b>1</b>            |
| 16 | <b><i>1,1-Dichloroethane</i></b>          | <b>5</b>                  |  | 39 | <b><i>1,2-Dichlorobenzene</i></b>                | <b>600</b>          |
| 17 | 1,1-Dichloroethylene                      | 3.2                       |  | 40 | <b><i>1,4-Dichlorobenzene</i></b>                | <b>5</b>            |
| 18 | <b><i>1,2-Dichloroethane</i></b>          | <b>0.5</b>                |  | 41 | <b><i>1,2,4 -Trichlorobenzene</i></b>            | <b>5</b>            |
| 19 | <b><i>1,2-Dichloroethylene(cis)</i></b>   | <b>6</b>                  |  |    |  |                     |
| 20 | <b><i>1,2-Dichloroethylene(trans)</i></b> | <b>10</b>                 |  |    |  |                     |
| 21 | <b><i>1,4-Dioxane</i></b>                 | <b>3</b>                  |  |    |  |                     |
| 22 | <b><i>Benzene</i></b>                     | <b>1</b>                  |  |    |  |                     |
| 23 | <b><i>Carbon Tetrachloride</i></b>        | <b>0.5</b>                |  |    |  |                     |

### Notes:

1. For constituents not shown italicized, the values shown in the Table 1 are the most stringent applicable receiving water objectives (freshwater or human health (consumption of water and organisms) as specified for that pollutant in 40 CFR 131.38<sup>6</sup>).
2. For constituents shown bold and italicized, the values shown in the Table are based on the California Department of Public Health maximum contaminant levels (MCLs) or Notification Level. Notification Level based triggers are underlined.
3. For hardness dependent metals, Table 5 shows the calculated metals criteria for Reach 3 and 4 of the Santa Ana River. For other freshwater discharge locations see Table 6. Calculated metal criteria values are based on specific hardness values in 50 mg/L increments.
4. For ocean discharges see Table 3. For bays, estuaries see Table 4.

**Table 2. Criteria for Discharges to Freshwater Designated MUN**

|    | CONSTITUENT                        | µg/L                            |    | CONSTITUENT                                      | µg/L                |
|----|------------------------------------|---------------------------------|----|--|---------------------|
| 1  | <b>Antimony</b>                    | <b>6</b>                        | 24 | Dichlorobromomethane                             | 0.56                |
| 2  | <b>Arsenic</b>                     | <b>50</b>                       | 25 | <b>Ethylbenzene</b>                              | <b>300</b>          |
| 3  | Cadmium                            | 5 or smaller value in Table 6   | 26 | <b><u>Methyl Isobutyl Ketone</u></b>             | <b><u>120</u></b>   |
| 4  | Chromium IV                        | 11                              | 27 | <b>Methyl Tertiary Butyl Ether (MTBE)</b>        | <b>13</b>           |
| 5  | Copper                             | See Table 6                     | 28 | <b>Naphthalene</b>                               | <b>17</b>           |
| 6  | Lead                               | See Table 6                     | 29 | Perchlorate                                      | 4                   |
| 7  | Mercury                            | 0.051                           | 30 | <b><u>Tert Butyl Alcohol (TBA)</u></b>           | <b><u>12</u></b>    |
| 8  | Nickel                             | 100 or smaller value in Table 6 | 31 | Tetrachloroethylene (PCE)                        | 0.8                 |
| 9  | Selenium                           | 5.0                             | 32 | <b>Toluene</b>                                   | <b>150</b>          |
| 10 | Silver                             | See Table 6                     | 33 | Trichloroethylene (TCE)                          | 2.7                 |
| 11 | <b>Thallium</b>                    | <b>2</b>                        | 34 | <b>Vinyl Chloride</b>                            | <b>0.5</b>          |
| 12 | Zinc                               | See Table 6                     | 35 | <b><u>1,2,3-Trichloropropane (1,2,3-TCP)</u></b> | <b><u>0.005</u></b> |
| 13 | Cyanide                            | 5.2                             | 36 | <b>1,3-Dichloropropylene</b>                     | <b>0.5</b>          |
| 14 | <b>1,1,2-Trichloroethane</b>       | <b>0.6</b>                      | 37 | <b>1,1,2,2-Tetrachloroethane</b>                 | <b>0.17</b>         |
| 15 | <b>1,1-Dichloroethane</b>          | <b>5</b>                        | 38 | <b>1,2-Dichlorobenzene</b>                       | <b>600</b>          |
| 16 | 1,1-Dichloroethylene               | 0.057                           | 39 | <b>1,4-Dichlorobenzene</b>                       | <b>5</b>            |
| 17 | 1,2-Dichloroethane                 | 0.38                            | 40 | <b>1,2,4 -Trichlorobenzene</b>                   | <b>5</b>            |
| 18 | <b>1,2-Dichloroethylene(cis)</b>   | <b>6</b>                        |    |  |                     |
| 19 | <b>1,2-Dichloroethylene(trans)</b> | <b>10</b>                       |    |  |                     |
| 20 | <b>1,4-Dioxane</b>                 | <b>3</b>                        |    |  |                     |
| 21 | <b>Benzene</b>                     | <b>1</b>                        |    |  |                     |
| 22 | Carbon Tetrachloride               | 0.25                            |    |  |                     |
| 23 | <b>Dibromochloropropane (DBCP)</b> | <b>0.2</b>                      |    |  |                     |

**Table 3. Criteria for Discharges to the Ocean**

|    | CONSTITUENT           | µg/L |    | CONSTITUENT               | µg/L |
|----|-----------------------|------|----|---------------------------|------|
| 1  | Arsenic               | 32   | 16 | Carbon Tetrachloride      | 0.9  |
| 2  | Cadmium               | 4    | 17 | Chloroform                | 130  |
| 3  | Chromium VI           | 8    | 18 | Chlorodibromomethane      | 8.6  |
| 4  | Copper                | 12   | 19 | Dichlorobromomethane      | 6.2  |
| 5  | Lead                  | 8    | 20 | Tetrachloroethylene (PCE) | 2.0  |
| 6  | Mercury               | 0.16 | 21 | Trichloroethylene (TCE)   | 27   |
| 7  | Nickel                | 20   | 22 | Vinyl Chloride            | 36   |
| 8  | Selenium              | 60   | 23 | 1,1,2-Trichloroethane     | 9.4  |
| 9  | Silver                | 2.8  | 24 | 1,3-Dichloropropylene     | 8.9  |
| 10 | Zinc                  | 80   | 25 | 1,4-Dichlorobenzene       | 18   |
| 11 | Total Cyanide         | 4    | 26 | Perchlorate               | 4    |
| 12 | 1,1,2-Trichloroethane | 9.4  |    |                           |      |
| 13 | 1,1-Dichloroethylene  | 0.9  |    |                           |      |
| 14 | 1,2-Dichloroethane    | 28   |    |                           |      |
| 15 | Benzene               | 5.9  |    |                           |      |

**Table 4. Criteria for Discharges to Bays and Estuaries**

|    | CONSTITUENT           | µg/L  |    | CONSTITUENT               | µg/L |
|----|-----------------------|-------|----|---------------------------|------|
| 1  | Arsenic               | 36    | 15 | Carbon Tetrachloride      | 4.4  |
| 2  | Cadmium               | 9.3   | 16 | Chlorodibromomethane      | 34   |
| 3  | Chromium VI           | 50    | 17 | Dichlorobromomethane      | 46   |
| 4  | Copper                | 3.1   | 18 | Tetrachloroethylene (PCE) | 8.85 |
| 5  | Lead                  | 8.1   | 19 | Trichloroethylene (TCE)   | 81   |
| 6  | Mercury               | 0.051 | 20 | Vinyl Chloride            | 525  |
| 7  | Nickel                | 8.2   | 21 | 1,1,2-Trichloroethane     | 42   |
| 8  | Selenium              | 71    | 22 | 1,3-Dichloropropylene     | 1700 |
| 9  | Silver                | 1.9   | 23 | 1,4-Dichlorobenzene       | 2600 |
| 10 | Zinc                  | 81    | 24 | Perchlorate               | 4    |
| 11 | 1,1,2-Trichloroethane | 42    |    |                           |      |
| 12 | 1,1-Dichloroethylene  | 3.2   |    |                           |      |
| 13 | 1,2-Dichloroethane    | 99    |    |                           |      |
| 14 | Benzene               | 71    |    |                           |      |



**Table 5. Total Recoverable Metals Criteria For Discharges to Reach 3 and 4 of the Santa Ana River and tributaries thereto (µg/L)**

| Hardness | Cadmium | Chromium (III) | Copper | Lead | Nickel | Silver | Zinc |
|----------|---------|----------------|--------|------|--------|--------|------|
| mg/L     |         |                |        |      |        |        |      |
| 50       | 1.4     | 117            | 13     | 8    | 29     | 1.2    | 67   |
| 100      | 2.5     | 207            | 24     | 19   | 52     | 4      | 120  |
| 150      | 3.4     | 289            | 34     | 33   | 74     | 8.2    | 169  |
| 200      | 4.2     | 365            | 44     | 47   | 94     | 13     | 216  |
| 250      | 5.1     | 438            | 53     | 62   | 113    | 20     | 260  |
| 300      | 5.8     | 509            | 62     | 79   | 132    | 27     | 304  |
| 350      | 6.6     | 577            | 71     | 96   | 151    | 35     | 346  |
| 400      | 7.3     | 644            | 79     | 113  | 169    | 44     | 388  |

**Table 6. Total Recoverable Metals Criteria For Discharges to other freshwaters Not Within or tributary to Reach 3 and 4 of the Santa Ana River**

| Hardness value | Cadmium | Chromium, III | Copper | Lead | Nickel | Silver | Zinc |
|----------------|---------|---------------|--------|------|--------|--------|------|
|                | µg/L    | µg/L          | µg/L   | µg/L | µg/L   | µg/L   | µg/L |
| 50             | 1.3     | 117           | 5.0    | 0.9  | 28.9   | 1.0    | 65.7 |
| 100            | 2.2     | 207           | 9.0    | 2.2  | 52.0   | 3.4    | 118  |
| 150            | 3.0     | 289           | 12.7   | 3.7  | 73.3   | 6.9    | 167  |
| 200            | 3.7     | 365           | 16.2   | 5.3  | 93.5   | 11.4   | 213  |
| 250            | 4.4     | 438           | 19.6   | 7.0  | 113    | 16.7   | 257  |
| 300            | 5.1     | 509           | 22.9   | 8.9  | 132    | 22.8   | 300  |
| 350            | 5.8     | 577           | 26.1   | 10.8 | 150    | 29.8   | 341  |
| 400            | 6.4     | 644           | 29.3   | 12.8 | 168    | 37.4   | 382  |

**ORDER NO. R8-2007-0041 WAS  
AMENDED. PLEASE DOWNLOAD ALSO  
A COPY OF THE AMENDING ORDER NO.  
R8-2009-0045**

State of California  
California Regional Water Quality Control Board  
Santa Ana Region

November 30, 2007

ITEM: 13

SUBJECT: Issuance of general discharge permit for discharges to surface waters of groundwater resulting from groundwater dewatering operations and/or groundwater cleanup activities at sites within the San Diego Creek/Newport Bay Watershed polluted by petroleum hydrocarbons, solvents, metals and/or salts - Order No. R8-2007-0041, NPDES NO. CAG918002

**DISCUSSION:**

See attached Order No. R8-2007-0041 and Attachments

**RECOMMENDATIONS:**

Adopt Order No. R8-2007-0041, NPDES No. CAG918002 as presented.

**COMMENT SOLICITATION:**

Comments were solicited from the dischargers and the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt  
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch  
U.S. Fish and Wildlife Service, Carlsbad  
State Water Resources Control Board, Office of the Chief Counsel – Erik Spiess  
State Department of Water Resources, Glendale  
State Department of Fish and Game, Ontario  
California Coastal Commission – Carl Schwing  
California Department of Public Health, Santa Ana - Anthony Nhan  
California Department of Public Health, San Diego – Steve Williams  
California Department of Public Health, San Bernardino – Sean McCarthy  
San Bernardino County Flood Control and Transportation Department - Naresh Varma  
Riverside County Flood Control and Water Conservation District – Jason Uhley  
Orange County Public Facilities and Resources Department, Flood Control – Andy Ngo  
Orange County Health Care Agency - Seth Daugherty  
Orange County Resources and Development Management Department - Chris Crompton  
Orange County Planning & Development Services Department  
Orange County Water District - Nira Yamachika  
South Coast Air Quality Management District – Dr. Barry R. Wallerstein  
Orange County Coastkeeper - Garry Brown

Lawyers for Clean Water C/c San Francisco Baykeeper

Dr. Jack Skinner

Defend the Bay - Robert J. Caustin

Current R8-2007-0008 enrollees within the San Diego Creek/Newport bay Watershed

Current R8-2004-0021 enrollees

# California Regional Water Quality Control Board

## Santa Ana Region

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[www.waterboards.ca.gov/santaana](http://www.waterboards.ca.gov/santaana)

**ORDER NO. R8-2007-0041**  
**NPDES NO. CAG918002**

### GENERAL DISCHARGE PERMIT FOR DISCHARGES TO SURFACE WATERS OF GROUNDWATER RESULTING FROM GROUNDWATER DEWATERING OPERATIONS AND/OR GROUNDWATER CLEANUP ACTIVITIES AT SITES WITHIN THE SAN DIEGO CREEK/NEWPORT BAY WATERSHED POLLUTED BY PETROLEUM HYDROCARBONS, SOLVENTS, METALS AND/OR SALTS

A Discharger, as described in the following table, who has complied with the requirements for coverage under this Order, is authorized to discharge under this Order, once permit coverage is effective, as described in this Order.

|                    |  |
|--------------------|--|
| <b>Dischargers</b> | Parties within the San Diego Creek/Newport Bay Watershed who conduct dewatering operations or groundwater remediation at sites that have been polluted by petroleum hydrocarbons, solvents, metals and/or salts, etc., and propose to discharge groundwater to surface waters. |
|--------------------|--|

|   |                          |
|---|--------------------------|
| This Order was adopted by the Regional Water Quality Control Board on:  | <b>November 30, 2007</b> |
| This Order shall become effective on:   | <b>November 30, 2007</b> |
| This Order shall expire on:   | <b>November 1, 2012</b>  |
| The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a <b>minor</b> discharge. |                          |

IT IS HEREBY ORDERED, that in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on November 30, 2007.



Gerard J. Thibeault, Executive Officer

SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

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SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

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## **I. DISCHARGE INFORMATION**

Order No. R8-2007-0008, NPDES No. CAG918001 is a general NPDES permit adopted by the Regional Water Board on February 2, 2007 for discharges to surface waters of extracted and treated groundwater resulting from the cleanup of groundwater polluted by petroleum hydrocarbons and/or solvents at service stations and similar sites.

Order No. R8-2004-0021, NPDES No. CAG998002 is a general NPDES permit adopted by the Regional Water Board on December 20, 2004 for short-term groundwater-related discharges and de minimus wastewater discharges to surface waters within the San Diego Creek/Newport Bay watershed. Groundwater dewatering discharges in the San Diego Creek/ Newport Bay watershed cannot be classified as de minimus due to the frequent presence of nitrates and selenium in shallow groundwater. Total maximum daily loads (TMDLs) for nitrates and selenium in the watershed have been established.

Individually, these general Orders facilitated the processing of permit applications and the early implementation of projects regulated under each general permit within the Santa Ana Region. However, there are certain projects that necessitate regulation under both general permits (e.g., a short-term groundwater dewatering project may intercept a groundwater contaminant plume during dewatering operations).

This general permit will regulate discharges of treated wastewater from groundwater dewatering and/or groundwater remediation activities at sites polluted by petroleum hydrocarbons, solvents, metals and/or salts within the San Diego Creek/Newport Bay watershed.

## **II. GENERAL PERMIT APPLICATION**

### **A. New Dischargers**

At least 180 days before the start of a new discharge, the Discharger shall submit an application and obtain the authorization letter from the Executive Officer to discharge groundwater to surface waters. The application shall include the following information:

1. Notice of Intent to be covered under this general permit.
2. A site characterization study that defines the onsite contaminants petroleum hydrocarbons, solvents, metals and/or salts and their properties and the three-dimensional extent and concentration of contaminants in the subsurface, and includes a description of the geologic and hydrologic factors that control the migration of the contaminants.
3. An evaluation of the selenium concentrations in proposed discharges and a determination of whether immediate compliance with the numeric effluent limitations specified in this Order for individual constituents is feasible. If immediate compliance is feasible, then the Discharger can, upon authorization under this Order, discharge in accordance with the numeric effluent limitations and with the



remaining terms and conditions of this Order. If immediate compliance with the numeric selenium limitations is infeasible, then the Discharger must demonstrate that it is not reasonably possible to reduce or eliminate the discharge to surface waters. If it is demonstrated that it is not reasonably feasible to reduce or eliminate the discharge, then the Discharger must either (a) submit for approval by the Executive Officer a proposed plan and schedule that assures that selenium discharges in excess of those allowed pursuant to the effluent limitations will be offset on at least a one-to-one basis, or as determined by the Regional Water Board's Executive Officer; or, (b) demonstrate that the Discharger is a participating member of the Nitrogen and Selenium Management Program (NSMP) Working Group.

Any proposed selenium offset must assure that there is no net loading of selenium to surface waters within the San Diego Creek/Newport Bay watershed. Dischargers who pursue a selenium offset are required to identify a plan and schedule for implementation of the offset prior to commencing any new discharge, and are required to implement that plan and schedule upon approval by the Executive Officer. This plan/schedule is to reflect the shortest practicable time necessary to provide the offset. In no case shall this schedule extend beyond December 20, 2009. It is recognized that the offset may not be completed within the time frame of the actual discharge; therefore, in filing a Notice of Intent to obtain authorization to discharge under this Order, these Dischargers are required to acknowledge explicitly that no notice of termination will be issued and that compliance with this Order will continue to be required and enforced until such time as the offset is satisfactorily completed.

4. An evaluation of the nitrogen concentrations in proposed discharges and a determination of whether immediate compliance with the numeric effluent limitations specified in this Order for surface water discharges of nitrogen is feasible. A description of how a 50% reduction in nutrient discharges will be achieved if nitrogen is present in the discharges. If it is demonstrated that it is not reasonably feasible to achieve immediate compliance with the 50% reduction, then the Discharger is required to (1) identify a proposed plan and schedule whereby the 50% reduction will be achieved within the shortest practicable time, or (2) identify a proposed plan and schedule for implementation of a nitrogen offset. The nitrogen offset program must (a) assure the reduction of nitrogen loading to surface waters equivalent to the requisite 50% reduction, (b) assure the completion of the offset in the shortest practicable time, and (c) be implemented upon approval by the Executive Officer. It is recognized that the offset may not be completed within the time frame of the actual discharge; therefore, in filing a Notice of Intent to obtain authorization to discharge under this Order, these Dischargers are required to acknowledge explicitly that no notice of termination will be issued and that compliance with this Order will continue to be required and enforced until such time as the offset is satisfactorily completed.

5. The Discharger shall submit for approval by the Executive Officer of the Regional Water Board a fixed hardness value based on the 5th percentile of effluent hardness measurements or the average ambient receiving water hardness measurements for those sites polluted with metals (lead, cadmium, copper, chromium (III), nickel, silver, and zinc).
6. A report that shall include the following:
  - a. Chemical analysis of the untreated groundwater. A representative groundwater sample shall be analyzed for organic pollutants using EPA method 8260B or equivalent. The characterization of the groundwater shall include total arsenic, total recoverable cadmium, total recoverable chromium VI, total recoverable copper, total recoverable lead, total recoverable mercury, total recoverable nickel, total recoverable selenium, total recoverable zinc, organochlorine compounds (Total Chlordane, Total DDT, Toxaphene, and PCBs), dissolved oxygen (DO), sulfate, chloride, electrical conductivity, total dissolved solids, total suspended solids, total nitrogen, total inorganic nitrogen, hardness, and priority pollutants including 1,4-dioxane and perchlorate. The selenium analysis used shall assure analytical detection levels sufficient to assess compliance with the effluent limitations of this Order. Test results shall be reported with Minimum levels (ML) and method detection limit (MDL); laboratory analytical limits shall be sufficient to detect these constituents at the concentrations listed in Tables 1, 2, 3, 4, and Attachment H. If the results of this analysis demonstrate that compliance with the nitrate or selenium limitations in this Order cannot be achieved, Dischargers who are participating in the Nitrogen and Selenium Management Program (NSMP) Working Group shall comply with sub-paragraph V.A.1.b., below: Dischargers who are not participating in the Working Group shall comply with sub-paragraph II.A.5.a.(1), below.
    - (1) If not a member of the Working Group, the Discharger shall identify and assess selenium and nitrogen control and reduction BMPs, including volume-reduction techniques. Together with the NOI, the Discharger shall submit for approval by the Executive Officer a proposed plan and schedule for identifying, evaluating and implementing these BMPs. The BMP evaluation shall include consideration of potential positive and negative impacts that may result from the BMPs. The schedule shall reflect the shortest practicable time frame for the completion of the identified tasks. (see also Provisions VII.C.3.b., below).
  - b. The name of the proposed receiving water body, including the location (Latitude and Longitude) of the discharge point (s);
  - c. The estimated average and maximum daily flow rates, the start date of discharge (if a new discharge), and the duration of the discharge, and the estimated total volume of the discharge;
  - d. A map showing the path from the point of initial discharge to the ultimate location of discharge;

- e. A list of known or suspected leaking underground tanks and other facilities or operations that have, or may have impacted the quality of the underlying groundwater within the expected radius of influence of the project.
  - f. A discussion of the proposed dewatering and or cleanup project (if appropriate), including a review of the extraction system design and the status of definition of free product and dissolved product plumes for sites contaminated with petroleum hydrocarbon or solvents only (as appropriate);
  - g. A description of the proposed treatment system (if appropriate) and a certification report on the adequacy of each component of the proposed treatment system. This certification report shall contain a requirement-by-requirement analysis, based on accepted engineering practice, of how the process(es) and physical design(s) of the treatment system will ensure compliance with this Order. The design engineer shall affix his/her signature and engineering license number to this certification report. The report(s) shall also certify the following:
    - (1) all treatment facility startup and operation instruction manuals are adequate and available to operating personnel;
    - (2) all treatment facility maintenance and testing schedules are included in the treatment facility operation and maintenance manual (O&M Manual), which shall be kept readily accessible to onsite operating personnel; and
    - (3) influent and effluent sampling locations and ports are located in areas where samples representative of the waste stream to be monitored can be obtained.
  - h. A discussion of a plan for the prevention of run-on, interception and diversion of runoff, and prevention of infiltration and runoff from contaminated soils stored on-site, if the discharge is associated with a groundwater remediation project and soils containing petroleum projects or other pollutants will be maintained on-site.
  - i. Any other information deemed necessary by the Executive Officer.
7. The General Permit Application, including the NOI (see Attachment A of this Order), map(s), report, and fee, must be submitted to the following address:

Permitting Section  
California Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

## **B. Existing Dischargers**

1. Within forty five (45) days of the effective date of this Order, existing Dischargers within the San Diego Creek/Newport Bay watershed who are regulated under Order No. R8-2007-0008 and/or Order No. R8-2004-0021, and those Dischargers under individual waste discharge requirements who wish to be regulated under this Order, shall submit a copy of their current monitoring and reporting programs along with the Notice of Intent for this general permit. For Dischargers covered under only Order No. R8-2004-0021, the Notice of Intent must be filed only if the expected duration of

the discharge is more than one year from the date of initiation of the discharge. Additional information may be required if there has been a change in ownership of facility or changes in the character and/or treatment of the discharges

2. For existing Dischargers who have coverage under Order No. R8-2004-0021 for short-term groundwater-related discharges within the San Diego Creek/Newport Bay watershed and who do not participate in the Working Group, and for existing individual Dischargers who wish to obtain coverage under this general permit and who do not participate in the Working Group, when the results of selenium analysis required to be submitted as part of the Notice of Intent demonstrate non-compliance with the effluent limitations for selenium specified in this Order (Discharge Specification V.A.1.a.), the Discharger(s) shall:
  - a. Also submit with the Notice of Intent a demonstration that it is not reasonably feasible to reduce or eliminate the discharge;
  - b. Submit for approval a plan and schedule to offset selenium discharges in excess of those allowed pursuant to the effluent limitations of this Order. The plan/schedule is to reflect the shortest practicable time necessary to provide the offset;
  - c. Collect data on flow and selenium quality to assure that ongoing selenium discharges are properly accounted for and offset, pending development, approval and implementation of the offset plan;
  - d. Implement the offset plan upon approval by the Executive Officer; and
  - e. Acknowledge explicitly, as part of the Notice of Intent, that no notice of termination will be issued until such time as any requisite selenium offset is satisfactorily completed.
3. For freshwater discharges, within forty five (45) days of the effective date of this Order, Dischargers from those sites polluted with leaded gasoline or metals shall submit for approval by the Regional Water Board Executive Officer the proposed hardness value based on 5th percentile of effluent hardness measurements or the average ambient freshwater receiving water hardness measurements. Once approved by the Executive Officer, this hardness value shall be the basis for determining the lead/metals effluent limits for the discharge from Attachment "J" of this Order.
4. Each Discharger shall submit to the Executive Officer, as part of the application for proposed discharge, a report certifying the adequacy of each component of the proposed treatment system and the associated Operation and Maintenance (O&M) Manual. This certification shall contain a requirement-by-requirement analysis, based on accepted engineering practice, of how the process and physical design of the treatment systems will ensure compliance with this Order. The design engineer<sup>1</sup> shall affix his/her signature, professional license number and seal to this certification.

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<sup>1</sup> A registered civil engineer, registered geologist, or certified engineering geologist licensed in the State of California (Sections 6735, 7835, and 7835.1 of the California Business and Profession's Code).

### **C. General Permit Coverage**

Permit coverage will be effective when the Discharger has submitted a complete application and the Regional Water Board Executive Officer issues a discharge authorization letter<sup>2</sup> accompanied with the self monitoring program for the proposed discharge.

### **D. Termination of Coverage**

The Discharger shall inform the Regional Water Board by a letter if coverage under the permit is no longer needed. The Regional Water Board Executive Officer or designee shall issue a letter terminating coverage under the general permit. Permit coverage will be terminated only for those projects that have complied with all permit requirements. (See also Provisions Section VII.A.3.)

### **E. Changes from Authorization Under General Permit To Individual Permit.**

Dischargers already covered under the NPDES program, whether by general or individual permit, may elect to continue coverage under the existing valid permit(s) or may submit a complete application for coverage under this General Permit. Dischargers who submit a complete application under this General Permit are not required to submit an individual permit application. The Regional Water Board may request additional information and determine that a Discharger is not eligible for coverage under this General Permit and would be better regulated under an individual or other general NPDES permit or, for discharges to land, under waste discharge requirements (WDRs). If the Regional Water Board issues an NPDES permit or WDRs, the applicability of this General Permit to the specified discharge is immediately terminated on the effective date of the individual NPDES permit or WDRs.

## **III. FINDINGS**

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Water Board), finds:

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*The issuance by the Executive Officer of authorization to discharge under the terms and conditions of this Order is contingent on the satisfactory demonstration that termination/reduction of the discharge is not reasonably feasible.*

## A. Background.

Dischargers enrolled under Order No. R8-2007-0008 and/or Order No. R8-2004-0021<sup>3</sup> who discharge or propose to discharge treated wastewaters from dewatering and or groundwater remediation activities at sites polluted by petroleum hydrocarbons, solvents, metals and/or salts within the San Diego Creek/Newport Bay watershed must obtain coverage under this new Order. To obtain authorization for continued and future discharge to waters of the United States, Dischargers must submit a complete application, as described in II.A., or II.B., above, and obtain coverage in order to be regulated under this General Permit as provided in 40 Code of Federal Regulations<sup>4</sup> (CFR) section 122.28 (b)(2).

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

## B. Wastewater Description.

This Order regulates discharges to surface water from groundwater dewatering activities at construction development sites and/or discharges from temporary (mobile) or permanent groundwater remediation systems, operated to clean up groundwater contamination from petroleum hydrocarbons, solvents, metals and/or salts. The discharges are to inland fresh and Bay waters within the San Diego Creek/Newport Bay Watershed of the Santa Ana Region. (see additional discussions in the Fact Sheet Attachment F).

Adoption of this general permit is necessary to assure proper regulatory oversight of groundwater-related discharges within the San Diego Creek/Newport Bay watershed. As a matter of regulatory streamlining, this permit will regulate discharges within the San Diego Creek/Newport Bay watershed in lieu of coverage of these discharges under Order No. R8-2007-0008 and Order No. R8-2004-0021.

In summary, this general permit will regulate discharges from activities involving groundwater dewatering and groundwater remediation in areas where contamination from petroleum hydrocarbons, solvents, metals and/or salts may be present. These activities include the following:

1. Wastes associated with well installation, development, test pumping and purging;
2. Aquifer testing wastes;
3. Dewatering wastes from subterranean seepage;
4. Groundwater dewatering wastes at construction sites; and
5. Groundwater remediation.

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<sup>3</sup> For Dischargers covered under only Order No. R8-2004-0021, the Notice of Intent must be filed only if the expected duration of the discharge is more than one year from the date of initiation of the discharge.

<sup>4</sup> All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

- C. TMDLs.** In June 2007, the U.S. EPA approved the State's 2004-2006 303(d) list of impaired water bodies. This list included Reaches 1 and 2 of San Diego Creek and Upper and Lower Newport Bay. One or more of these water bodies were determined to be impaired by one or more pollutants, including the following: fecal coliform, nutrients, selenium, metals and organochlorine compounds (DDT, toxaphene, chlordane and PCBs). Nutrient, fecal coliform, sediment, and toxic pollutants (including selenium and organochlorine compounds) TMDLs have been established for the San Diego Creek/Newport Bay watershed. This Order implements relevant TMDL requirements (see Attachment F).
- D. Regulatory Approach.** For those new Dischargers subject to this Order who choose not to participate in the Nitrogen and Selenium Management Program (NSMP) Working Group, this Order adopts the following regulatory approach. First, these Dischargers are required to evaluate the selenium concentration in their potential discharges to determine whether immediate compliance with the numeric effluent limitations specified in this Order is feasible and either: (1) discharge in accordance with the numeric effluent limitations (if feasible) and with the remaining terms and conditions of this Order; or (2) if compliance with the numeric selenium limitations is infeasible, then the Discharger must demonstrate that it is not reasonably possible to reduce or eliminate the discharge to surface waters, and if it is demonstrated that it is not reasonably feasible to reduce or eliminate the discharge, then the Discharger must either (a) not commence the discharge, or (b) the Discharger must identify and participate in a program that assures that selenium discharges in excess of those allowed pursuant to the effluent limitations will be offset on at least a one-to-one basis, or as determined by the Regional Water Board's Executive Officer. For those Dischargers subject to this Order who choose to participate in the NSMP Working Group, this Order adopts the regulatory approach employed in Order No. R8-2004-0021 (see Attachment F).
- E. Legal Authorities.** This Order is issued pursuant to Section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC) (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from groundwater dewatering and cleanup facilities to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260).
- F. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information obtained through issuance and enforcement of general permits Orders No. R8-2007-0008 and R8-2004-0021 for groundwater cleanup and dewatering discharges, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and, thus constitutes part of the Findings for this Order. Attachments A through E and G through I are also incorporated into this Order.

- G. State law.** The provisions/requirements in subsections VI.B. of this Order are included to implement State law only. These provisions are not required or authorized under the federal CWA; consequently, violations of these provisions are not subject to the enforcement remedies that are available for NPDES violations.
- H. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code section 21000 et seq. (*County of Los Angeles v. California State Water Resources Control Board* (2006) 143 Cal.App.4th 985, mod. (Nov. 6, 2006, B184034) 50 Cal.Rptr.3d 619, 632-636.)
- I. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharges authorized by this Order must meet minimum federal technology-based requirements and/or Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet.
- J. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) of 40 CFR require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements that are more stringent than technology-based requirements and are necessary to meet applicable water quality standards. The rationale for these requirements is discussed in the Fact Sheet.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).



**K. Water Quality Control Plans.** The Regional Water Board adopted a revised Water Quality Control Plan for the Santa Ana Region (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Santa Ana Region addressed through the plan. More recently, the Basin Plan was amended significantly to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. This Basin Plan Amendment was adopted by the Regional Water Board on January 22, 2004. The State Water Resources Control Board (State Water Board) and Office of Administrative Law (OAL) approved the Amendment on September 30, 2004 and December 23, 2004, respectively. EPA approved the surface water standards components of the N/TDS Amendment on June 20, 2007.

The existing and potential beneficial uses of Newport Bay, San Diego Creek and tributaries include:

1. Navigation,
2. Water Contact Recreation,
3. Non-contact Water Recreation,
4. Commercial and Sportfishing,
5. Preservation of Biological Habitats of Special Significance,
6. Wildlife Habitat,
7. Rare, Threatened or Endangered Species,
8. Spawning, Reproduction, and Development,
9. Marine Habitat,
10. Shellfish Harvesting,
11. Estuarine Habitat,
12. Warm Freshwater Habitat, and
13. Groundwater Recharge (intermittent beneficial use).

Newport Bay and San Diego Creek are excepted from MUN beneficial use. Surface waters within the San Diego Creek Watershed overlie and recharge the only groundwater management zone in the watershed, the Irvine Groundwater Management Zone. The existing and potential beneficial uses of Irvine Groundwater Management Zone include:

1. Municipal and Domestic Supply,
2. Agricultural Supply,
3. Industrial Service Supply, and
4. Industrial Process Supply

Requirements of this Order implement the Basin Plan.

- L. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new, numeric toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- M. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for toxicity control. Requirements of this Order implement the SIP.
- N. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under Section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new, revised or newly interpreted water quality objective. This Order includes compliance schedules and interim effluent limitations and/or discharge specifications. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) and/or discharge specifications is included in the Fact Sheet.
- O. Interim Performance-Based Limits:** Implementation by Dischargers not participating in the NSMP Working Group of an acceptable selenium offset program; including implementation of volume-reduction/other BMPs coupled with interim steps necessary to implement the offset, constitutes interim performance-based limits. For Dischargers participating in the NSMP Working Group, participation in the Working Group and timely and effective implementation of the Regional Board-approved Work Plans constitute interim, performance-based effluent limitations.

**P. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. section 131.21; 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

**Q. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality based effluent limitations for individual pollutants. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR and SIP, which was approved by USEPA on May 18, 2000. Apart from certain surface water standards changes resulting from the N/TDS Basin Plan amendment, all beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

**R. Antidegradation Policy.** Section 131.12 requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy, where the federal policy applies under federal law. Resolution 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provisions of section 131.12 and State Water Board Resolution 68-16.

- S. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. This is a new general permit that will combine and consolidate effluent limitations in existing general permits Order No. R8-2007-0008 and Order No. R8-2004-0021.
- T. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- U. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- V. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.
- W. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

#### **IV. DISCHARGE PROHIBITIONS**

- A. The discharge of oil, trash, industrial waste sludge, or other solids directly to the surface waters in this region or in any manner that will ultimately affect surface waters in this region is prohibited.
- B. The discharge of any substances in concentrations toxic to animal or plant life is prohibited.
- C. The discharge of wastes to property not owned or controlled by the Discharger is prohibited.

- D. Odors, vectors, and other nuisances of waste origin are prohibited beyond the limits of each Discharger's facility.
- E. The addition of chemicals to the extracted groundwater, exclusive of chlorine to control biofouling (H<sub>2</sub>S) in treatment systems, is prohibited except when approved by the Executive Officer.
- F. The direct discharges of waste to Areas of Special Biological Significance, including Newport Beach Marine Life Refuge and Irvine Coast Marine Life Refuge are prohibited.

## V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

### A. Effluent Limitations

#### 1. Final Effluent Limitations

- a. The Discharger shall maintain compliance with the following effluent limitations at approved compliance point monitoring locations:

**Table 1. Effluent Limitations Applicable to Discharge to San Diego Creek & Tributaries**

| Constituent   | Maximum Daily Concentration Limit (µg/L)                      | Average Monthly Concentration Limit (µg/L) |
|---|---|--|
| Arsenic   | 246   | 123  |
| Total Recoverable Chromium VI   | 16  | 8.0  |
| Total Recoverable Mercury   | 0.102   | 0.051                                      |
| Total Recoverable Selenium  | 8.2 (see paragraph V.A.1.b. & c., below)                      | 4.1 (see paragraph V.A.1.b. & c., below)   |
| Metal Constituents not listed in this Table that are hardness dependent | (see Discharge Specifications V.A.2., below and Attachment B) |  |
| Other Constituents Listed in Table 3, below                             | See Table 3, below  | See Table 3, below                         |

**Table 2. Effluent Limitations Applicable to Upper and Lower Newport Bay**

| Constituent | Maximum Daily Concentration Limit (µg/L) | Average Monthly Concentration Limit (µg/L) |
|-------------|--|--|
| Arsenic     | 59                                       | 29   |

**Table 2. Effluent Limitations Applicable to Upper and Lower Newport Bay**

| Constituent                                 | Maximum Daily Concentration Limit (µg/L)   | Average Monthly Concentration Limit (µg/L)   |
|---|--|--|
| Total Recoverable Cadmium                   | 15   | 7.6  |
| Total Recoverable Chromium VI               | 82   | 41   |
| Total Recoverable Copper                    | 4.8  | 2.4  |
| Total Recoverable Lead                      | 13   | 6.6  |
| Total Recoverable Mercury                   | 0.102                                      | 0.051  |
| Total Recoverable Nickel                    | 13   | 6.7  |
| Total Recoverable Selenium                  | 116 (see paragraph V.A.1.b. c. & d, below) | 58 (see paragraph V.A.1.b., c. and d, below) |
| Total Recoverable Silver                    | 1.9  | 0.95   |
| Total Recoverable Zinc                      | 90   | 45   |
| Other Constituents Listed in Table 3, below | See Table 3, below                         | See Table 3, below                           |

**Table 3. Effluent Limitations Applicable to All Receiving Waters**

| Constituent                               | Maximum Daily Concentration Limit (µg/L) | Average Monthly Concentration Limit (µg/L) |
|---|--|--|
| 1,1,1-Trichloroethane (TCA)               | 10                                       | 5  |
| 1,1-Dichloroethane                        | 10                                       | 5  |
| 1,1-Dichloroethylene                      | 12                                       | 6  |
| 1,2-Dichloroethane                        | 1.0                                      | 0.5  |
| 1,2-Dichloroethylene (sum of cis & trans) | 20.1                                     | 10   |
| 1,2- Dichloroethylene (cis)               | 12                                       | 6  |
| 1,2-Dichloroethylene (trans)              | 20                                       | 10   |
| 1,4-Dioxane                               | 6  | 3  |
| Benzene                                   | 2  | 1  |
| Carbon Tetrachloride                      | 1  | 0.5  |
| Chloroform                                | 10                                       | 5  |

**Table 3. Effluent Limitations Applicable to All Receiving Waters**

| <b>Constituent</b>                   | <b>Maximum Daily Concentration Limit (µg/L)</b> | <b>Average Monthly Concentration Limit (µg/L)</b> |
|--------------------------------------|---|---|
| Dichlorobromomethane                 | 10  | 5   |
| Ethylbenzene                         | 20  | 10  |
| Methyl Ethyl Ketone                  | 241   | 120   |
| Methyl Isobutyl Ketone               | 241   | 120   |
| Methyl Tertiary Butyl Ether (MTBE)   | 26  | 13  |
| Naphthalene                          | 20  | 10  |
| Perchlorate                          | 8   | 4   |
| Tert Butyl Alcohol (TBA)             | 34  | 12  |
| Tetrachloroethylene (PCE)            | 10  | 5   |
| Toluene                              | 20  | 10  |
| Trichloroethylene (TCE)              | 10  | 5   |
| Vinyl Chloride                       | 1   | 0.5   |
| Xylene (Total)                       | 20  | 10  |
| 1,2,3-Trichloropropane (1,2,3-TCP)   | 1.01  | 0.5   |
| <b>Constituent</b>                   | <b>Maximum Daily Concentration Limit</b>        |   |
| Total Dissolved Solids (TDS)         | See Section V.A.3., below                       |   |
| Total Inorganic Nitrogen (TIN)       | See Section V.A.4., below                       |   |
| Total Residual Chlorine <sup>5</sup> | 0.1 mg/L  |   |
| Suspended Solids                     | 75 mg/L   |   |
| Sulfides                             | 0.4 mg/L  |   |
| Total Petroleum Hydrocarbons         | 100 µg/L (ppb)                                  |   |
| Oil and Grease                       | 15 mg/L   |   |

- b. Compliance with the Total Recoverable Selenium limit specified in V.A.1.a., above (see also Provisions VII.C.6.b.), shall be achieved as soon as possible but no later than December 20, 2009, provided that:

- (1) The Discharger becomes and remains a member of the Nitrogen and Selenium Management Program Working Group (NSMP Working Group, or Working Group), including the Discharger's satisfaction of financial and participatory commitments established by the Working Group; and
  - (2) The Discharger implements one or more reasonable BMPs for volume-reduction and/or treatment identified as part of the Work Plan developed and implemented by the Working Group;
  - (3) The Discharger, as a member of the Working Group, is implementing the Work Plan in accordance with the schedule approved by the Regional Water Board (see Provision VII.C.6.c. - Other Special Provisions), or acceptable alternative dates approved by the Executive Officer; and
  - (4) **Interim Limits:** With regard to the selenium contained in the discharges subject to this Order by Working Group participants, the requirements contained in this Discharge Specification constitute interim performance-based effluent limitations and compliance schedules for these discharges, and also satisfy requirements contained in Receiving Water Limitations VI.A.1. and VI.A.2.i., Discharge Prohibitions IV.B., and Provision VII.A.2. The provisions of this Discharge Specification also constitute interim performance-based effluent limitations and compliance schedules and satisfy the requirements of Receiving Water Limitations VI.A.1. and VI.A.2.i., Discharge Prohibitions IV.B., and Provision VII.A.2. for contractors and licensees of participating Working Group members, provided that such contractors and licensees are adhering to BMP and monitoring provisions as described in this Discharge Specification.
- c. If the conditions specified in V.A.1.b., above are not satisfied, then compliance with the Total Recoverable Selenium limit in V.A.1.a., above shall be achieved immediately, unless the Discharger implements a program or programs approved by the Executive Officer to offset discharges in excess of the effluent limits. (See Provision VII.C.6.b.)
- d. If the Discharger does not become or does not remain a member of the NSMP Working Group and all other conditions specified in Section V.A.1.a., above, are not satisfied, and if the Discharger demonstrates that immediate compliance with the Total Recoverable Selenium limits in V.A.1.a. is infeasible, the Discharger shall either:
- (1) Cease or not commence discharges until compliance with the Total Recoverable Selenium limits in V.A.1.a. can be achieved; or,
  - (2) Proceed to implement a selenium offset program approved by the Executive Officer as follows:



- i. In no case shall the schedule for completion of the offset exceed December 20, 2009. Compliance with the Total Recoverable Selenium limit specified in V.A.1.a., above, shall be achieved no later than December 20, 2009. The offset program shall address offset of selenium discharges that take place while the offset plan is developed and approved.
  - ii. Collect data on flow and selenium quality to assure that ongoing selenium discharges are properly accounted for and offset pending development, approval and implementation of the offset plan; and
  - iii. Implement the offset plan/schedule upon approval by the Executive Officer.
  - iv. The offset program shall be revised if and as necessary to reflect compliance with the selenium limits but shall continue to assure that selenium discharges that took place in excess of the selenium limits are appropriately offset. Any approved amended offset program shall be implemented upon approval by the Executive Officer. (see also Provisions VII.C.6.a.)
2. For discharges to freshwater<sup>6</sup> bodies, the maximum daily and average monthly effluent limitations for the metal constituent shall not exceed the concentrations tabulated in Attachment "B" of this Order, corresponding to the effluent or receiving water hardness<sup>7</sup>, as approved by the Executive Officer.
3. The TDS concentration of the discharge shall not exceed the TDS limitations for the affected receiving water shown in Table 4., below:

**Table 4. TDS Effluent Limits**

| Receiving Water  | TDS, mg/L |
|--|-----------|
| Reach 1, San Diego Creek, below Jeffrey Rd               | 1500      |
| Reach 2, San Diego Creek, above Jeffrey Rd to Headwaters | 720       |

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<sup>6</sup> Waters in which the salinity is equal to or less than 1 part per thousand 95% or more of the time.

<sup>7</sup> For direct discharges into receiving water, this hardness value is the 5th percentile of effluent hardness measurements or the average ambient receiving water hardness measurements, whichever is more restrictive. Where discharges are into storm drains with wastewater/nuisance flows, the effluent 5th percentile hardness value shall be used.

4. When the quality of extracted/dewatered groundwater discharges exceeds 1 mg/L Total Inorganic Nitrogen (TIN), the ambient total nitrogen (TN) mass in the discharges shall be reduced by 50%. That is, the average monthly mass of total nitrogen (TN) discharges shall not be greater than 50% of the mass of TN in the extracted groundwater. This limit applies unless the Discharger develops and implements, an offset program approved by the Executive Officer (See Provisions VII.C.6.). The total nitrogen monthly mass emission rate for the extracted groundwater and discharged wastewater shall be determined by using the following formula:

$$\text{Mass (lbs/month) of extracted or discharged wastewater} = 8.34 \times Q \times C$$

Where:

Q= total flow of extracted or discharged within the month in million gallons

C= the sum of all measurements for the parameter within the month (in milligrams per liter) for the extracted or discharged wastewater divided by the total number of samples.

5. The pH of the discharge shall be within 6.5 and 8.5 pH units (see also Receiving Water Limitations VI.A.2.h.).
6. There shall be no visible oil and grease in the discharge.

**B. Land Discharge Specifications – Not Applicable**

**C. Reclamation Specifications – Not Applicable**

**VI. RECEIVING WATER LIMITATIONS**

**A. Surface Water Limitations**

1. The discharge of wastes shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Board, as required by the Federal CWA and regulations adopted thereunder.
2. The discharge shall not cause any of the following:
  - a. Coloration of the receiving waters that causes a nuisance or adversely affects beneficial uses. The natural color of fish, shellfish or other inland, bay and estuarine water resources used for human consumption shall not be impaired.
  - b. Deposition of oil, grease, wax or other materials in the receiving waters in concentrations that result in a visible film or in coating objects in the water, or which cause a nuisance or adversely affect beneficial uses.

- c. An increase in the amounts of suspended or settleable solids in the receiving waters that will cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.
  - d. Taste or odor producing substances in the receiving waters at concentrations that cause a nuisance or adversely affect beneficial uses.
  - e. The presence of radioactive materials in the receiving waters in concentrations that is deleterious to human, plant or animal life.
  - f. The depletion of the dissolved oxygen concentration below 5.0 mg/l.
  - g. The temperature of the receiving waters to be raised above 90°F (32°C) during the period of June through October, or above 78°F (26°C) during the rest of the year.
  - h. Change the ambient pH levels more than 0.5 pH units.
  - i. The concentration of pollutants in the water column, sediments, or biota to adversely affect the beneficial uses of the receiving water. The discharge shall not result in the degradation of inland surface water communities and populations, including vertebrate, invertebrate, and plant species.
3. Pollutants not specifically mentioned and limited in this Order shall not be discharged at levels that will bioaccumulate in aquatic resources to levels, which are harmful to human health.
4. The discharge shall not result in acute toxicity in ambient receiving waters. The effluent shall be deemed to cause acute toxicity when the toxicity test of 100% effluent as required in Attachment E, results in failure of the test as determined using the pass or fail<sup>8</sup> test protocol specified in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA/821-R-02-012, October 2002). The Discharger shall immediately stop the discharge whenever the discharge fails the toxicity test(s). Prior to resuming the discharge, the Discharger shall identify and correct the source of the toxicity to the satisfaction of the Executive Officer.

## **B. Groundwater Limitations**

1. The discharge shall not cause the underlying groundwater to be degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

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<sup>8</sup> Control survival must be 90% or greater for an acceptable test. The test "passes" if survival in the control and effluent concentration equals or exceeds 90%. The test "fails" if survival in the effluent is less than 90%, and is significantly different from control survival (which must be 90% or greater), as determined by hypothesis testing.

2. The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentrations greater than background water quality.
3. Groundwater discharges exceeding the Irvine groundwater management zone water quality objectives for TDS (910 mg/L) and TIN (7.9 mg/L) may be returned to the same management zone from which it was extracted without reduction of the TDS or TIN concentrations so long as the concentrations of those constituents are no greater than when the groundwater was first extracted. Incidental increases in the TDS and TIN concentrations (such as may occur during air stripping) of treated effluent will not be considered increases for the purposes of determining compliance with this discharge specification.

## **VII. PROVISIONS**

### **A. Standard Provisions**

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. Neither the treatment nor the discharge of waste shall create, or threaten to create, a nuisance or pollution as defined by Section 13050 of the California Water Code.
3. This Order expires on November 1, 2012. However, coverage under the permit shall continue in force and effect until a new Order is issued for those Dischargers who are authorized to discharge under the terms and conditions of the Order and who submit a renewal application by April 1, 2012. For those Dischargers who do not submit a renewal application by April 1, 2012, discharges of wastewater under this Order shall be terminated by November 1, 2012, unless the Executive Officer of the Regional Water Board has given prior approval for a delayed submission of renewal application. If the Executive Officer has given prior approval for a delayed submission of a renewal application, then the discharge can continue after November 1, 2012.
4. The Executive Officer shall determine whether the proposed discharge is eligible for coverage under this general permit, after which, the Executive Officer may;
  - a. Authorize the proposed discharge by transmitting a "Discharge Authorization Letter" to the discharge proponent (now an "authorized Discharger") authorizing the initiation of the discharge under the conditions of this Order and any other conditions consistent with this Order which are necessary to protect the beneficial uses of the receiving waters; or,
  - b. Require the discharge proponent to obtain an individual NPDES permit prior to any discharge to surface waters within the Santa Ana Region.

5. The discharge authorization letter from the Executive Officer shall specify any conditions necessary to protect the beneficial uses of the receiving waters and shall specify the Self-Monitoring Program for the proposed discharge in accordance with this Order. The discharge authorization letter may be terminated or revised by the Executive Officer at any time. The discharge authorization letter, which identifies the discharge location(s), is incorporated by reference into this Order.
6. The Discharger shall implement any required plan/programs in this Order upon approval by the Executive Officer and shall update the plans/programs as appropriate during the life of this general permit. The updated plans shall be approved by the Executive Officer.
7. The Discharger shall comply with all requirements of this Order and the terms, conditions and limitations of the discharge authorization letter.
8. The discharge shall be limited to groundwater and added treatment chemicals approved by the Executive Officer.
9. The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with these waste discharge requirements.
10. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
11. The Discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any effluent limitations specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.
12. The Discharger shall, at all times, properly operate and maintain<sup>9</sup> all facilities and systems of treatment (and related appurtenances) and control which are installed or used by the Discharger to achieve compliance with this Order and the conditions of the authorization letter(s) from the Executive Officer. Proper operation and maintenance shall include the following:
  - a. Effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls and appropriate quality assurance procedures.
  - b. Regular maintenance and inspection of all systems.
  - c. Maintenance of records of the inspection results that shall be made available to the Regional Water Board whenever required and demanded.

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<sup>9</sup> *Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls and appropriate quality assurance procedures.*

13. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement.
14. This Order does not convey any property rights of any sort, or any exclusive privilege.
15. This Order is not transferable to any person except after notice to and approval by the Regional Water Board.
16. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the Discharger from his liabilities under federal, state, or local laws, nor guarantee the Discharger a capacity right in the receiving waters.
17. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.
18. Any violation of this Order constitutes a violation of the CWA, its regulations, and the California Water Code, and is grounds for enforcement action and/or termination of the authorization to discharge.
19. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
20. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, discharge limitations (e.g., maximum daily effluent limitation), or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (951) 782-4130 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.
21. All treatment facility startup and operation instruction manuals shall be maintained and available to operating personnel at the site where groundwater remediation is being conducted.

## **B. Monitoring and Reporting Program (MRP) Requirements**

The Discharger shall comply with the monitoring and reporting program issued by the Executive Officer with the authorization letter. Revision of this monitoring and reporting program by the Executive Officer may be necessary to confirm that the Discharger is in compliance with the requirements and provisions contained in this Order. Revisions may be made by the Executive Officer at any time during the term of this Order, and may include a reduction or an increase in the number of constituents to be monitored, the frequency of monitoring or the number and size of samples collected. Reduction in the number of constituents being monitored and/or frequency of monitoring shall be considered only if the following conditions are satisfied:

1. Only Dischargers without any criminal convictions under any environmental statute and NPDES civil judicial and administrative enforcement actions are eligible.
2. Only Dischargers covered under the previous Order No. R8-2007-0008 and/or Order No. R8-2004-0021 or under an existing individual permit for the last consecutive two years who have had no effluent violations of monitored constituents during the last two years are eligible.
3. Constituents with effluent limitations shall be monitored at least once per year.
4. The following performance conditions shall be met:
  - a. For a specific constituent, reduction of weekly monitoring to bi-monthly (every two weeks) monitoring can be considered with approval by the Executive Officer when the effluent monitoring data for the last 3 months show compliance with effluent limitations.
  - b. For a specific constituent, reduction of bi-monthly (every two weeks) monitoring to monthly monitoring can be considered with approval by the Executive Officer when the effluent monitoring data for the last 6 months show compliance with effluent limitations.
  - c. For specific constituent, reduction of monthly monitoring to quarterly monitoring can be considered with approval by the Executive Officer when the effluent monitoring data for the last 12 months show compliance with effluent limitations.
5. Should any of the weekly, bi-monthly, monthly, quarterly or annual monitoring for a specific constituent show effluent concentrations above the effluent limit, the frequency of monitoring for that constituent shall be increased to weekly or daily as directed by the Executive Officer.
6. Should groundwater treatment and discharge stop for more than one month, the frequency of monitoring shall be increased to weekly as directed by the Executive Officer.

## **C. Special Provisions**

### **1. Reopener Provisions**

- a. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant (including organochlorine compounds) generated by special conditions included in this Order. These special conditions may be, but are not limited to whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.
- b. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, or amendments thereto, the Board will revise and modify this Order in accordance with such standards.
- c. This Order may be reopened to address any changes in State or federal plans, policies or regulations that would affect the quality requirements for the discharges.
- d. Any permit noncompliance constitutes a violation of the CWA and the California Water Code and is grounds for enforcement action; for permit or authorization letter termination, revocation and reissuance, or modification; the issuance of an individual permit; or for denial of a renewal application.
- e. This Order may be modified by the Regional Water Board prior to the expiration date to include effluent or receiving water limitations for toxic constituents determined to be present in significant amounts in the discharge through the comprehensive monitoring program included as part of this Order.
- f. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by a Discharger for modification, revocation and reissuance, or termination of this Order or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- g. This Order may be reopened to include applicable technology-based effluent limitations, as appropriate when and if the Working Group has identified the selenium treatment technology (-ies) appropriate for these types of discharge.



## **2. Special Studies, Technical Reports and Additional Monitoring Requirements – Selenium**

- a. When immediate compliance with the Total Recoverable Selenium limits specified in Section V.A.1.a. is infeasible, the Discharger shall submit quarterly progress reports to describe the progress of studies and/or actions undertaken to reduce selenium in the effluent, and to achieve compliance with the requirements of this Order. This includes actions taken pursuant to an approved BMP and Pollution Prevention Plan (See Section VII.C.3. "Best Management Practices and Pollution Prevention", below), and actions taken pursuant to any approved selenium offset program. The Discharger shall submit this report together with the Quarterly Report required in Attachment E. Provided that the Discharger becomes and remains a member of the Nitrogen and Selenium Management Program (NSMP) Working Group, which is implementing a Work Plan that includes investigations of nitrogen and selenium sources and controls in the San Diego Creek Watershed, reports prepared and submitted pursuant to the NSMP shall constitute compliance with this requirement.

## **3. Best Management Practices and Pollution Prevention**

### **a. Pollutant Minimization Program**

The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as Detected, but Not Quantified (DNQ) when the effluent limitation is less than the Method Detection Limit (MDL), sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

- (1) A sample result is reported as DNQ and the effluent limitation is less than the RL; or
- (2) A sample result is reported as Not Detected (ND) and the effluent limitation is less than the MDL, using reporting protocols described in MRP Section X.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- (1) An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
- (2) Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;

- (3) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
- (4) Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
- (5) An annual status report that shall be sent to the Regional Water Board including:
  - i. All PMP monitoring results for the previous year;
  - ii. A list of potential sources of the reportable priority pollutant(s);
  - iii. A summary of all actions undertaken pursuant to the control strategy; and
  - iv. A description of actions to be taken in the following year.

b. Selenium/Nitrogen BMP

The Discharger shall implement the approved plan and schedule for identifying, evaluating and implementing selenium and nitrogen control and reduction BMPs, including volume-reduction techniques. (see Section II.C.5., above).

**4. Construction, Operation and Maintenance Specifications**

An Operation and Maintenance (O&M) Manual shall be developed prior to the initiation of the discharge and shall be readily accessible to site operating personnel. The O&M Manual shall include the following:

- a. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
- b. Process and equipment inspection and maintenance schedules.
- c. Describe preventive (fail-safe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events.
- d. Identification and description of the possible sources of accidental loss, bypass of untreated or partially treated wastes, and polluted drainage including power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes and possible spills.

**5. Special Provisions for Municipal Facilities (POTWs Only) - Not Applicable**

**6. Other Special Provisions**

- a. The Discharger shall implement the nitrogen and/or selenium offset programs upon approval by the Executive Officer.

- b. When and if a practicable selenium treatment technology becomes available, the Discharger shall implement that technology and comply with the final selenium limits in this Order within one year of notification of the need to do so by the Regional Water Board, but in no case later than December 20, 2009.
- c. The Discharger may achieve compliance with the nitrogen limitations of this Order by the development and implementation of an offset program approved by the Regional Water Board's Executive Officer. Any such offset program shall (1) assure the loading of total nitrogen to surface waters as the result of groundwater dewatering and/or cleanup discharges does not exceed that allowed pursuant to the effluent limits in this Order, and (2) shall be completed as soon as possible.
- b. Revisions to an approved selenium offset program that is approved by the Executive Officer but is not fully implemented may be made at the discretion of the Executive Officer in response to revisions to this Order to address revised selenium criteria and/or approved revisions to the selenium TMDL for the San Diego Creek/Newport Bay watershed.
- c. The following constitute elements of the Work Plan administered by the NSMP Working Group, along with target completion dates. In each case, the element of the Work Plan shall be completed by the Working Group as soon as possible but no later than the target completion date shown. The Executive Officer is authorized to revise these target completion dates if demonstrated to be necessary and appropriate:
  - (1) Manage the Work Plan with input from identified technical experts, relevant regulatory agencies and the public (through completion of all elements of the Work Plan);
  - (2) Perform complementary monitoring and assessment of selenium and nutrient sources in the watershed, utilizing, in part, ongoing selenium and nutrient studies performed by others (12/20/2008);
  - (3) Identify and assess selenium treatment technologies, including potential future technologies ;
  - (4) Identify and assess selenium BMPs (including volume-reduction techniques);
  - (5) Facilitate demonstration testing of identified selenium treatment technologies and BMPs;
  - (6) Develop a draft selenium offset, trading or mitigation program based upon the outcome of complementary monitoring, treatment technology and BMP-related Work Plan elements and submit to Executive Officer for review (6/20/2009);
  - (7) Implement the final selenium offset, trading or mitigation program upon the Executive Officer's approval, but no later than 12/20/2009;
  - (8) Evaluate nutrient TMDL, including load/wasteload allocations and reduction targets (focusing particularly on groundwater-related sources, loadings and reductions);

- (9) Develop a draft nutrient offset, trading or mitigation program based upon the outcome of complementary monitoring and TMDL assessment Work Plan elements (6/20/2009);
  - (10) Implement the final nutrient offset, trading or mitigation program upon the Executive Officer's approval but no later than 12/20/2009; and,
  - (11) Develop a recommended selenium site-specific objective for the Newport Bay/San Diego Creek watershed if appropriate based upon outcome of other Work Plan elements (with completion date of 6/17/2009).
- d. All treatment facility startup and operation instruction manuals shall be maintained and available to operating personnel at the site where groundwater cleanup operation is controlled and managed.

## **7. Compliance Schedules - Not Applicable**

## **VIII. COMPLIANCE DETERMINATION**

- A.** Compliance with Discharge Specification A.1. shall be based on the minimum levels specified in Attachment "H" of this Order, unless an alternative minimum level<sup>10</sup> (ML) is approved for the pollutant of concern by the Regional Water Board's Executive Officer. If the Discharger develops a limit of quantitation (LOQ) specific to their matrix, the LOQ shall serve as the ML with the approval of the Executive Officer of the Regional Water Board. If no minimum level is specified for a constituent, the method detection limit (MDL) specified in 40 CFR 136 shall be used. If no MDL is available, the lowest practicable detection limit shall be used with the approval of the Executive Officer. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
- B.** Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e.g., weekly, monthly, quarterly), that sample shall serve to characterize the discharge for the entire interval.
- C. Multiple Sample Data.** When determining compliance with an AMEL, or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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<sup>10</sup> *Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.*

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

**D. Average Monthly Effluent Limitation (AMEL).** If the average (or when applicable, the median determined by paragraph VIII.4., above, for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**E. Maximum Daily Effluent Limitation (MDEL).** If a daily discharge (or when applicable, the median determined by paragraph VIII.4., above, for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

**F. Compliance determination with the Tert Butyl Alcohol (TBA) average monthly limit** shall be based on all samples taken within the month or if the monitoring frequency requirement is once monthly, every two months or quarterly, a minimum of four test results from the most recent sample events.

**G. Effect of Conducting a Pollutant Minimization Program (PMP).** If a sample result for a priority pollutant, or the arithmetic mean or median of multiple sample results is below the RL, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the Discharger conducts a PMP for the priority pollutant (as described in Provision VI.C.3), the Discharger shall not be deemed out of compliance.

- H. One Sample Analysis.** Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e.g., monthly or weekly average), that sample shall serve to characterize the discharge for the entire interval. If quarterly sample results show noncompliance with the average monthly limit and that sample result is used for compliance determinations for each month of the quarter, then three separate violations of the average monthly limit shall be deemed to have occurred.
- I. Single Sample vs. Group of Chemicals.** Compliance with a single effluent limitation which applies to a group of chemicals (e.g., PCBs), based on a single sample shall be determined by considering the concentrations of individual members of the group to be zero if the analytical response for the individual chemical falls below the method detection limit (MDL) for that chemical.
- J. Priority Pollutants.** For priority pollutants, the Discharger shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation.

Compliance determination shall be based on the reporting level (ML)<sup>11</sup> specified in Attachment "H" of this Order, unless an alternative reporting level is approved by the Regional Water Board's Executive Officer. When there is more than one RL value for a given substance, the Discharger shall select the RL value that is below the calculated effluent limitation, and use its associated analytical method, listed in Attachment "H" of the M&RP. If no RL value is below the effluent limitation, then the Regional Water Board will select the lowest RL value and its associated analytical method.

- K. Non-Priority Pollutants.** The discharge shall be considered to be in compliance with an effluent limitation if the arithmetic mean of all test results for the monitoring period is less than the constituent effluent limitation. Analytical results that are less than the approved reporting limit shall be assigned a value of zero.

**L. Selenium Limits.**

1. For Working Group Members: With regard to the selenium contained in the discharges subject to this Order by the Discharger as a NSMP Working Group member, compliance with the requirements specified in V.A.1.b. provides interim compliance with the requirements contained in Discharge Prohibitions III.B., Receiving Water Limitations VI.A.2.i. and VI.A.3.; and Provision VII.A.2.

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<sup>11</sup> Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

2. For Non-Working Group Members: With regard to the selenium contained in the discharges subject to this Order by the Discharger as a non-NSMP Working Group member, compliance with the requirements specified in V.A.1.d., provides interim compliance with the requirements contained in Discharge Prohibitions IV.B., Receiving Water Limitations , VI.A.1., VI.A.2.i., and VI.A.3.; and Provisions VII.A.2.

#### **M. Nitrogen Limits.**

The Discharger will also be deemed in compliance with the requirements of Receiving Water Limitations VI.A.1. and VI.A.2.i., when the Discharger is either in compliance with the nitrogen limit specified in Discharge Specifications V.A.4. or when the Discharger implements an acceptable offset program for nitrogen discharges.

**NOTICE OF INTENT**

TO COMPLY WITH THE TERMS AND CONDITIONS OF THE GENERAL DISCHARGE PERMIT FOR DISCHARGES TO SURFACE WATERS OF GROUNDWATER RESULTING FROM GROUNDWATER DEWATERING OPERATIONS AND/OR GROUNDWATER CLEANUP ACTIVITIES AT SITES WITHIN THE SAN DIEGO CREEK/NEWPORT BAY WATERSHED POLLUTED BY PETROLEUM HYDROCARBONS, SOLVENTS, METALS AND/OR SALTS  
(Order No. R8-2007-0041, NPDES No. CAG918002)

**I. PERMITTEE** (*Person/Agency Responsible for the Discharge*)

Agency/Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

|                       |            |       |     |
|-----------------------|------------|-------|-----|
| Street                | City       | State | ZIP |
| Contact Person/Email: | Phone: ( ) |       |     |

**II. FACILITY**

Name: \_\_\_\_\_

Location: \_\_\_\_\_

|                       |            |       |     |
|-----------------------|------------|-------|-----|
| Street                | City       | State | ZIP |
| Contact Person/Email: | Phone: ( ) |       |     |

a. Projected Flow Rate (*gpd*): \_\_\_\_\_; b. Receiving Water (*identify*): \_\_\_\_\_c. Estimated Duration of Discharge (*weeks/months*): \_\_\_\_\_**III. BILLING INFORMATION** (*Where annual fee invoices should be sent*)

Agency/Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

|                 |            |       |     |
|-----------------|------------|-------|-----|
| Street          | City       | State | ZIP |
| Contact Person: | Phone: ( ) |       |     |

**IV. INDICATE EXISTING PERMIT NUMBER:** (*if applicable*)

a. Individual permit Order No. \_\_\_\_\_ NPDES No. \_\_\_\_\_

b. General Permit Order No. R8-2007-0008 \_\_\_\_\_ General Permit Order No. R8-2004-0021 \_\_\_\_\_

c. Others (specify) \_\_\_\_\_

**V. NOTICE OF TERMINATION:**

*I acknowledge that no notice of Termination will be filed and that compliance with the terms and conditions of this Order if and as amended, will be required and enforced until such time as requisite total nitrogen and selenium offsets that pertain to the discharge are satisfactorily completed.*

**VI. CERTIFICATION:**

*I certify under penalty of law that I am an authorized representative of the permittee and that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the permittee will comply with the terms and conditions stipulated in **Order No. R8-2007-0041**, including the monitoring and reporting program issued by the Executive Officer of the Regional Board, and that **the permittee has documented and made all practicable attempts to avoid, reduce or eliminate the discharge as required by section II.A.3., of the Order.***

Name and Official Title: \_\_\_\_\_ Email: \_\_\_\_\_

(type or print)  
Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Remarks: *The person who signs Section VI-Certification shall meet the requirements of 40 CFR 122.22.*



| CALCULATED TOTAL RECOVERABLE METALS EFFLUENT LIMITATIONS FOR FRESHWATER DISCHARGES |           |              |                |              |           |              |           |              |           |              |           |              |           |              |
|--|-----------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| Hardness value   | Cadmium   |              | Chromium (III) |              | Copper    |              | Lead      |              | Nickel    |              | Silver    |              | Zinc      |              |
|  | Max Daily | Ave. Monthly | Max Daily      | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly |
| 1  | 0.0       | 0.1          | 40.0           | 4.8          | 0.2       | 0.2          | 0.2       | 0.0          | 9.5       | 1.1          | 0.0       | —            | 2.4       | 2.4          |
| 2  | 0.1       | 0.1          | 70.5           | 8.4          | 0.3       | 0.3          | 0.4       | 0.0          | 17.1      | 1.9          | 0.0       | —            | 4.3       | 4.3          |
| 3  | 0.1       | 0.1          | 98.3           | 11.7         | 0.5       | 0.4          | 0.6       | 0.0          | 24.1      | 2.7          | 0.0       | —            | 6.0       | 6.1          |
| 4  | 0.1       | 0.2          | 124.4          | 14.8         | 0.6       | 0.6          | 0.9       | 0.0          | 30.7      | 3.4          | 0.0       | —            | 7.7       | 7.7          |
| 5  | 0.1       | 0.2          | 149.3          | 17.8         | 0.8       | 0.7          | 1.2       | 0.0          | 37.1      | 4.1          | 0.0       | —            | 9.3       | 9.3          |
| 6  | 0.2       | 0.2          | 173.4          | 20.7         | 0.9       | 0.8          | 1.6       | 0.1          | 43.3      | 4.8          | 0.0       | —            | 10.8      | 10.9         |
| 7  | 0.2       | 0.3          | 196.7          | 23.4         | 1.1       | 0.9          | 1.9       | 0.1          | 49.4      | 5.5          | 0.0       | —            | 12.3      | 12.4         |
| 8  | 0.2       | 0.3          | 219.4          | 26.2         | 1.2       | 1.0          | 2.3       | 0.1          | 55.3      | 6.1          | 0.0       | —            | 13.8      | 13.9         |
| 9  | 0.3       | 0.3          | 241.7          | 28.8         | 1.4       | 1.1          | 2.6       | 0.1          | 61.1      | 6.8          | 0.1       | —            | 15.2      | 15.4         |
| 10   | 0.3       | 0.4          | 263.4          | 31.4         | 1.5       | 1.3          | 3.0       | 0.1          | 66.8      | 7.4          | 0.1       | —            | 16.7      | 16.8         |
| 11   | 0.3       | 0.4          | 284.8          | 33.9         | 1.7       | 1.4          | 3.4       | 0.1          | 72.4      | 8.0          | 0.1       | —            | 18.1      | 18.2         |
| 12   | 0.4       | 0.4          | 305.9          | 36.5         | 1.8       | 1.5          | 3.8       | 0.1          | 77.9      | 8.7          | 0.1       | —            | 19.4      | 19.6         |
| 13   | 0.4       | 0.4          | 326.6          | 38.9         | 2.0       | 1.6          | 4.2       | 0.2          | 83.3      | 9.3          | 0.1       | —            | 20.8      | 21.0         |
| 14   | 0.4       | 0.5          | 347.0          | 41.4         | 2.1       | 1.7          | 4.6       | 0.2          | 88.7      | 9.9          | 0.1       | —            | 22.1      | 22.3         |
| 15   | 0.5       | 0.5          | 367.2          | 43.8         | 2.2       | 1.8          | 5.0       | 0.2          | 94.1      | 10.4         | 0.1       | —            | 23.5      | 23.7         |
| 16   | 0.5       | 0.5          | 387.1          | 46.1         | 2.4       | 1.9          | 5.5       | 0.2          | 99.3      | 11.0         | 0.1       | —            | 24.8      | 25.0         |
| 17   | 0.6       | 0.5          | 406.8          | 48.5         | 2.5       | 2.0          | 5.9       | 0.2          | 104.6     | 11.6         | 0.2       | —            | 26.1      | 26.3         |
| 18   | 0.6       | 0.6          | 426.3          | 50.8         | 2.7       | 2.1          | 6.3       | 0.2          | 109.8     | 12.2         | 0.2       | —            | 27.4      | 27.6         |
| 19   | 0.6       | 0.6          | 445.6          | 53.1         | 2.8       | 2.2          | 6.8       | 0.3          | 114.9     | 12.8         | 0.2       | —            | 28.7      | 28.9         |
| 20   | 0.7       | 0.6          | 464.8          | 55.4         | 2.9       | 2.3          | 7.3       | 0.3          | 120.0     | 13.3         | 0.2       | —            | 30.0      | 30.2         |
| 21   | 0.7       | 0.6          | 483.7          | 57.7         | 3.1       | 2.4          | 7.7       | 0.3          | 125.0     | 13.9         | 0.2       | —            | 31.2      | 31.5         |
| 22   | 0.7       | 0.7          | 502.5          | 59.9         | 3.2       | 2.5          | 8.2       | 0.3          | 130.1     | 14.4         | 0.3       | —            | 32.5      | 32.8         |
| 23   | 0.8       | 0.7          | 521.1          | 62.1         | 3.4       | 2.6          | 8.7       | 0.3          | 135.0     | 15.0         | 0.3       | —            | 33.7      | 34.0         |
| 24   | 0.8       | 0.7          | 539.6          | 64.3         | 3.5       | 2.6          | 9.2       | 0.4          | 140.0     | 15.5         | 0.3       | —            | 35.0      | 35.3         |
| 25   | 0.9       | 0.7          | 557.9          | 66.5         | 3.6       | 2.7          | 9.6       | 0.4          | 144.9     | 16.1         | 0.3       | —            | 36.2      | 36.5         |
| 26   | 0.9       | 0.8          | 576.2          | 68.7         | 3.8       | 2.8          | 10.1      | 0.4          | 149.8     | 16.6         | 0.3       | —            | 37.4      | 37.7         |
| 27   | 0.9       | 0.8          | 594.2          | 70.8         | 3.9       | 2.9          | 10.6      | 0.4          | 154.7     | 17.2         | 0.4       | —            | 38.6      | 39.0         |
| 28   | 1.0       | 0.8          | 612.2          | 73.0         | 4.1       | 3.0          | 11.1      | 0.4          | 159.5     | 17.7         | 0.4       | —            | 39.9      | 40.2         |
| 29   | 1.0       | 0.8          | 630.1          | 75.1         | 4.2       | 3.1          | 11.7      | 0.5          | 164.3     | 18.2         | 0.4       | —            | 41.1      | 41.4         |
| 30   | 1.1       | 0.8          | 647.8          | 77.2         | 4.3       | 3.2          | 12.2      | 0.5          | 169.1     | 18.8         | 0.4       | —            | 42.2      | 42.6         |
| 31   | 1.1       | 0.9          | 665.4          | 79.3         | 4.5       | 3.3          | 12.7      | 0.5          | 173.8     | 19.3         | 0.5       | —            | 43.4      | 43.8         |
| 32   | 1.1       | 0.9          | 683.0          | 81.4         | 4.6       | 3.4          | 13.2      | 0.5          | 178.6     | 19.8         | 0.5       | —            | 44.6      | 45.0         |
| 33   | 1.2       | 0.9          | 700.4          | 83.5         | 4.7       | 3.5          | 13.7      | 0.5          | 183.3     | 20.4         | 0.5       | —            | 45.8      | 46.2         |
| 34   | 1.2       | 0.9          | 717.7          | 85.5         | 4.9       | 3.6          | 14.3      | 0.6          | 188.0     | 20.9         | 0.5       | —            | 47.0      | 47.4         |
| 35   | 1.3       | 0.9          | 735.0          | 87.6         | 5.0       | 3.7          | 14.8      | 0.6          | 192.6     | 21.4         | 0.6       | —            | 48.1      | 48.5         |
| 36   | 1.3       | 1.0          | 752.1          | 89.6         | 5.1       | 3.7          | 15.3      | 0.6          | 197.3     | 21.9         | 0.6       | —            | 49.3      | 49.7         |
| 37   | 1.3       | 1.0          | 769.2          | 91.7         | 5.3       | 3.8          | 15.9      | 0.6          | 201.9     | 22.4         | 0.6       | —            | 50.5      | 50.9         |
| 38   | 1.4       | 1.0          | 786.2          | 93.7         | 5.4       | 3.9          | 16.4      | 0.6          | 206.5     | 22.9         | 0.7       | —            | 51.6      | 52.0         |
| 39   | 1.4       | 1.0          | 803.1          | 95.7         | 5.5       | 4.0          | 17.0      | 0.7          | 211.1     | 23.4         | 0.7       | —            | 52.8      | 53.2         |
| 40   | 1.5       | 1.1          | 819.9          | 97.7         | 5.7       | 4.1          | 17.5      | 0.7          | 215.7     | 24.0         | 0.7       | —            | 53.9      | 54.4         |
| 41   | 1.5       | 1.1          | 836.7          | 99.7         | 5.8       | 4.2          | 18.1      | 0.7          | 220.2     | 24.5         | 0.7       | —            | 55.1      | 55.5         |
| 42   | 1.6       | 1.1          | 853.3          | 101.7        | 5.9       | 4.3          | 18.7      | 0.7          | 224.8     | 25.0         | 0.8       | —            | 56.2      | 56.6         |
| 43   | 1.6       | 1.1          | 869.9          | 103.7        | 6.1       | 4.4          | 19.2      | 0.7          | 229.3     | 25.5         | 0.8       | —            | 57.3      | 57.8         |
| 44   | 1.6       | 1.1          | 886.5          | 105.7        | 6.2       | 4.4          | 19.8      | 0.8          | 233.8     | 26.0         | 0.8       | —            | 58.4      | 58.9         |
| 45   | 1.7       | 1.2          | 902.9          | 107.6        | 6.3       | 4.5          | 20.4      | 0.8          | 238.3     | 26.5         | 0.9       | —            | 59.6      | 60.1         |
| 46   | 1.7       | 1.2          | 919.3          | 109.6        | 6.5       | 4.6          | 21.0      | 0.8          | 242.7     | 27.0         | 0.9       | —            | 60.7      | 61.2         |
| 47   | 1.8       | 1.2          | 935.7          | 111.5        | 6.6       | 4.7          | 21.5      | 0.8          | 247.2     | 27.5         | 0.9       | —            | 61.8      | 62.3         |

| CALCULATED TOTAL RECOVERABLE METALS EFFLUENT LIMITATIONS FOR FRESHWATER DISCHARGES |           |              |                |              |           |              |           |              |           |              |           |              |           |              |
|--|-----------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| Hardness value   | Cadmium   |              | Chromium (III) |              | Copper    |              | Lead      |              | Nickel    |              | Silver    |              | Zinc      |              |
|  | Max Daily | Ave. Monthly | Max Daily      | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly |
| 48   | 1.8       | 1.2          | 952.0          | 113.5        | 6.7       | 4.8          | 22.1      | 0.9          | 251.6     | 28.0         | 1.0       | —            | 62.9      | 63.4         |
| 49   | 1.8       | 1.2          | 968.2          | 115.4        | 6.9       | 4.9          | 22.7      | 0.9          | 256.1     | 28.4         | 1.0       | —            | 64.0      | 64.6         |
| 50   | 1.9       | 1.3          | 984.3          | 117.3        | 7.0       | 5.0          | 23.3      | 0.9          | 260.5     | 28.9         | 1.0       | —            | 65.1      | 65.7         |
| 51   | 1.9       | 1.3          | 1000.4         | 119.2        | 7.1       | 5.0          | 23.9      | 0.9          | 264.9     | 29.4         | 1.1       | —            | 66.2      | 66.8         |
| 52   | 2.0       | 1.3          | 1016.4         | 121.2        | 7.3       | 5.1          | 24.5      | 1.0          | 269.3     | 29.9         | 1.1       | —            | 67.3      | 67.9         |
| 53   | 2.0       | 1.3          | 1032.4         | 123.1        | 7.4       | 5.2          | 25.1      | 1.0          | 273.7     | 30.4         | 1.2       | —            | 68.4      | 69.0         |
| 54   | 2.1       | 1.3          | 1048.4         | 125.0        | 7.5       | 5.3          | 25.7      | 1.0          | 278.0     | 30.9         | 1.2       | —            | 69.5      | 70.1         |
| 55   | 2.1       | 1.4          | 1064.2         | 126.9        | 7.7       | 5.4          | 26.3      | 1.0          | 282.4     | 31.4         | 1.2       | —            | 70.6      | 71.2         |
| 56   | 2.1       | 1.4          | 1080.1         | 128.7        | 7.8       | 5.5          | 26.9      | 1.0          | 286.7     | 31.8         | 1.3       | —            | 71.7      | 72.3         |
| 57   | 2.2       | 1.4          | 1095.8         | 130.6        | 7.9       | 5.5          | 27.5      | 1.1          | 291.0     | 32.3         | 1.3       | —            | 72.8      | 73.4         |
| 58   | 2.2       | 1.4          | 1111.5         | 132.5        | 8.0       | 5.6          | 28.2      | 1.1          | 295.3     | 32.8         | 1.4       | —            | 73.9      | 74.5         |
| 59   | 2.3       | 1.4          | 1127.2         | 134.4        | 8.2       | 5.7          | 28.8      | 1.1          | 299.6     | 33.3         | 1.4       | —            | 74.9      | 75.6         |
| 60   | 2.3       | 1.5          | 1142.8         | 136.2        | 8.3       | 5.8          | 29.4      | 1.1          | 303.9     | 33.8         | 1.4       | —            | 76.0      | 76.6         |
| 61   | 2.4       | 1.5          | 1158.4         | 138.1        | 8.4       | 5.9          | 30.0      | 1.2          | 308.2     | 34.2         | 1.5       | —            | 77.1      | 77.7         |
| 62   | 2.4       | 1.5          | 1173.9         | 139.9        | 8.6       | 6.0          | 30.7      | 1.2          | 312.5     | 34.7         | 1.5       | —            | 78.2      | 78.8         |
| 63   | 2.5       | 1.5          | 1189.4         | 141.8        | 8.7       | 6.0          | 31.3      | 1.2          | 316.7     | 35.2         | 1.6       | —            | 79.2      | 79.9         |
| 64   | 2.5       | 1.5          | 1204.9         | 143.6        | 8.8       | 6.1          | 31.9      | 1.2          | 321.0     | 35.7         | 1.6       | —            | 80.3      | 80.9         |
| 65   | 2.5       | 1.5          | 1220.3         | 145.4        | 9.0       | 6.2          | 32.6      | 1.3          | 325.2     | 36.1         | 1.6       | —            | 81.3      | 82.0         |
| 66   | 2.6       | 1.6          | 1235.6         | 147.3        | 9.1       | 6.3          | 33.2      | 1.3          | 329.5     | 36.6         | 1.7       | —            | 82.4      | 83.1         |
| 67   | 2.6       | 1.6          | 1250.9         | 149.1        | 9.2       | 6.4          | 33.8      | 1.3          | 333.7     | 37.1         | 1.7       | —            | 83.5      | 84.1         |
| 68   | 2.7       | 1.6          | 1266.2         | 150.9        | 9.3       | 6.4          | 34.5      | 1.3          | 337.9     | 37.5         | 1.8       | —            | 84.5      | 85.2         |
| 69   | 2.7       | 1.6          | 1281.4         | 152.7        | 9.5       | 6.5          | 35.1      | 1.4          | 342.1     | 38.0         | 1.8       | —            | 85.6      | 86.3         |
| 70   | 2.8       | 1.6          | 1296.6         | 154.5        | 9.6       | 6.6          | 35.8      | 1.4          | 346.3     | 38.5         | 1.9       | —            | 86.6      | 87.3         |
| 71   | 2.8       | 1.7          | 1311.8         | 156.4        | 9.7       | 6.7          | 36.4      | 1.4          | 350.5     | 38.9         | 1.9       | —            | 87.7      | 88.4         |
| 72   | 2.9       | 1.7          | 1326.9         | 158.2        | 9.9       | 6.8          | 37.1      | 1.4          | 354.6     | 39.4         | 2.0       | —            | 88.7      | 89.4         |
| 73   | 2.9       | 1.7          | 1342.0         | 160.0        | 10.0      | 6.8          | 37.7      | 1.5          | 358.8     | 39.9         | 2.0       | —            | 89.8      | 90.5         |
| 74   | 2.9       | 1.7          | 1357.0         | 161.7        | 10.1      | 6.9          | 38.4      | 1.5          | 362.9     | 40.3         | 2.1       | —            | 90.8      | 91.5         |
| 75   | 3.0       | 1.7          | 1372.0         | 163.5        | 10.2      | 7.0          | 39.1      | 1.5          | 367.1     | 40.8         | 2.1       | —            | 91.8      | 92.6         |
| 76   | 3.0       | 1.7          | 1387.0         | 165.3        | 10.4      | 7.1          | 39.7      | 1.5          | 371.2     | 41.2         | 2.2       | —            | 92.9      | 93.6         |
| 77   | 3.1       | 1.8          | 1401.9         | 167.1        | 10.5      | 7.2          | 40.4      | 1.6          | 375.3     | 41.7         | 2.2       | —            | 93.9      | 94.7         |
| 78   | 3.1       | 1.8          | 1416.8         | 168.9        | 10.6      | 7.2          | 41.1      | 1.6          | 379.5     | 42.1         | 2.3       | —            | 94.9      | 95.7         |
| 79   | 3.2       | 1.8          | 1431.6         | 170.6        | 10.8      | 7.3          | 41.7      | 1.6          | 383.6     | 42.6         | 2.3       | —            | 96.0      | 96.8         |
| 80   | 3.2       | 1.8          | 1446.5         | 172.4        | 10.9      | 7.4          | 42.4      | 1.7          | 387.7     | 43.1         | 2.4       | —            | 97.0      | 97.8         |
| 81   | 3.3       | 1.8          | 1461.3         | 174.2        | 11.0      | 7.5          | 43.1      | 1.7          | 391.8     | 43.5         | 2.4       | —            | 98.0      | 98.8         |
| 82   | 3.3       | 1.9          | 1476.0         | 175.9        | 11.1      | 7.6          | 43.8      | 1.7          | 395.9     | 44.0         | 2.5       | —            | 99.0      | 99.9         |
| 83   | 3.3       | 1.9          | 1490.7         | 177.7        | 11.3      | 7.6          | 44.4      | 1.7          | 399.9     | 44.4         | 2.5       | —            | 100.1     | 100.9        |
| 84   | 3.4       | 1.9          | 1505.4         | 179.4        | 11.4      | 7.7          | 45.1      | 1.8          | 404.0     | 44.9         | 2.6       | —            | 101.1     | 101.9        |
| 85   | 3.4       | 1.9          | 1520.1         | 181.2        | 11.5      | 7.8          | 45.8      | 1.8          | 408.1     | 45.3         | 2.6       | —            | 102.1     | 102.9        |
| 86   | 3.5       | 1.9          | 1534.7         | 182.9        | 11.7      | 7.9          | 46.5      | 1.8          | 412.1     | 45.8         | 2.7       | —            | 103.1     | 104.0        |
| 87   | 3.5       | 1.9          | 1549.3         | 184.7        | 11.8      | 8.0          | 47.2      | 1.8          | 416.2     | 46.2         | 2.7       | —            | 104.1     | 105.0        |
| 88   | 3.6       | 2.0          | 1563.9         | 186.4        | 11.9      | 8.0          | 47.9      | 1.9          | 420.2     | 46.7         | 2.8       | —            | 105.2     | 106.0        |
| 89   | 3.6       | 2.0          | 1578.4         | 188.1        | 12.0      | 8.1          | 48.6      | 1.9          | 424.3     | 47.1         | 2.8       | —            | 106.2     | 107.0        |
| 90   | 3.7       | 2.0          | 1593.0         | 189.9        | 12.2      | 8.2          | 49.3      | 1.9          | 428.3     | 47.6         | 2.9       | —            | 107.2     | 108.0        |
| 91   | 3.7       | 2.0          | 1607.4         | 191.6        | 12.3      | 8.3          | 50.0      | 1.9          | 432.3     | 48.0         | 2.9       | —            | 108.2     | 109.1        |
| 92   | 3.8       | 2.0          | 1621.9         | 193.3        | 12.4      | 8.3          | 50.7      | 2.0          | 436.3     | 48.5         | 3.0       | —            | 109.2     | 110.1        |
| 93   | 3.8       | 2.0          | 1636.3         | 195.0        | 12.6      | 8.4          | 51.4      | 2.0          | 440.4     | 48.9         | 3.0       | —            | 110.2     | 111.1        |
| 94   | 3.9       | 2.1          | 1650.7         | 196.8        | 12.7      | 8.5          | 52.1      | 2.0          | 444.4     | 49.4         | 3.1       | —            | 111.2     | 112.1        |

| CALCULATED TOTAL RECOVERABLE METALS EFFLUENT LIMITATIONS FOR FRESHWATER DISCHARGES |           |              |                |              |           |              |           |              |           |              |           |              |           |              |
|--|-----------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| Hardness value   | Cadmium   |              | Chromium (III) |              | Copper    |              | Lead      |              | Nickel    |              | Silver    |              | Zinc      |              |
|  | Max Daily | Ave. Monthly | Max Daily      | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly |
| 95   | 3.9       | 2.1          | 1665.1         | 198.5        | 12.8      | 8.6          | 52.8      | 2.1          | 448.4     | 49.8         | 3.2       | —            | 112.2     | 113.1        |
| 96   | 3.9       | 2.1          | 1679.4         | 200.2        | 12.9      | 8.6          | 53.5      | 2.1          | 452.3     | 50.2         | 3.2       | —            | 113.2     | 114.1        |
| 97   | 4.0       | 2.1          | 1693.7         | 201.9        | 13.1      | 8.7          | 54.2      | 2.1          | 456.3     | 50.7         | 3.3       | —            | 114.2     | 115.1        |
| 98   | 4.0       | 2.1          | 1708.0         | 203.6        | 13.2      | 8.8          | 54.9      | 2.1          | 460.3     | 51.1         | 3.3       | —            | 115.2     | 116.1        |
| 99   | 4.1       | 2.1          | 1722.3         | 205.3        | 13.3      | 8.9          | 55.6      | 2.2          | 464.3     | 51.6         | 3.4       | —            | 116.2     | 117.1        |
| 100  | 4.1       | 2.2          | 1736.5         | 207.0        | 13.4      | 9.0          | 56.3      | 2.2          | 468.2     | 52.0         | 3.4       | —            | 117.2     | 118.1        |
| 101  | 4.2       | 2.2          | 1750.7         | 208.7        | 13.6      | 9.0          | 57.1      | 2.2          | 472.2     | 52.4         | 3.5       | —            | 118.2     | 119.1        |
| 102  | 4.2       | 2.2          | 1764.9         | 210.4        | 13.7      | 9.1          | 57.8      | 2.3          | 476.1     | 52.9         | 3.6       | —            | 119.2     | 120.1        |
| 103  | 4.3       | 2.2          | 1779.1         | 212.1        | 13.8      | 9.2          | 58.5      | 2.3          | 480.1     | 53.3         | 3.6       | —            | 120.2     | 121.1        |
| 104  | 4.3       | 2.2          | 1793.2         | 213.7        | 13.9      | 9.3          | 59.2      | 2.3          | 484.0     | 53.8         | 3.7       | —            | 121.1     | 122.1        |
| 105  | 4.4       | 2.3          | 1807.3         | 215.4        | 14.1      | 9.3          | 59.9      | 2.3          | 488.0     | 54.2         | 3.8       | —            | 122.1     | 123.1        |
| 106  | 4.4       | 2.3          | 1821.4         | 217.1        | 14.2      | 9.4          | 60.7      | 2.4          | 491.9     | 54.6         | 3.8       | —            | 123.1     | 124.1        |
| 107  | 4.5       | 2.3          | 1835.5         | 218.8        | 14.3      | 9.5          | 61.4      | 2.4          | 495.8     | 55.1         | 3.9       | —            | 124.1     | 125.1        |
| 108  | 4.5       | 2.3          | 1849.5         | 220.4        | 14.4      | 9.6          | 62.1      | 2.4          | 499.7     | 55.5         | 3.9       | —            | 125.1     | 126.1        |
| 109  | 4.6       | 2.3          | 1863.5         | 222.1        | 14.6      | 9.6          | 62.9      | 2.4          | 503.6     | 55.9         | 4.0       | —            | 126.1     | 127.1        |
| 110  | 4.6       | 2.3          | 1877.5         | 223.8        | 14.7      | 9.7          | 63.6      | 2.5          | 507.6     | 56.4         | 4.1       | —            | 127.0     | 128.1        |
| 111  | 4.6       | 2.4          | 1891.5         | 225.5        | 14.8      | 9.8          | 64.3      | 2.5          | 511.5     | 56.8         | 4.1       | —            | 128.0     | 129.1        |
| 112  | 4.7       | 2.4          | 1905.4         | 227.1        | 15.0      | 9.9          | 65.1      | 2.5          | 515.4     | 57.2         | 4.2       | —            | 129.0     | 130.0        |
| 113  | 4.7       | 2.4          | 1919.3         | 228.8        | 15.1      | 9.9          | 65.8      | 2.6          | 519.2     | 57.7         | 4.3       | —            | 130.0     | 131.0        |
| 114  | 4.8       | 2.4          | 1933.2         | 230.4        | 15.2      | 10.0         | 66.6      | 2.6          | 523.1     | 58.1         | 4.3       | —            | 130.9     | 132.0        |
| 115  | 4.8       | 2.4          | 1947.1         | 232.1        | 15.3      | 10.1         | 67.3      | 2.6          | 527.0     | 58.5         | 4.4       | —            | 131.9     | 133.0        |
| 116  | 4.9       | 2.4          | 1961.0         | 233.7        | 15.5      | 10.2         | 68.1      | 2.7          | 530.9     | 59.0         | 4.5       | —            | 132.9     | 134.0        |
| 117  | 4.9       | 2.4          | 1974.8         | 235.4        | 15.6      | 10.2         | 68.8      | 2.7          | 534.7     | 59.4         | 4.5       | —            | 133.9     | 134.9        |
| 118  | 5.0       | 2.5          | 1988.6         | 237.0        | 15.7      | 10.3         | 69.5      | 2.7          | 538.6     | 59.8         | 4.6       | —            | 134.8     | 135.9        |
| 119  | 5.0       | 2.5          | 2002.4         | 238.7        | 15.8      | 10.4         | 70.3      | 2.7          | 542.5     | 60.3         | 4.7       | —            | 135.8     | 136.9        |
| 120  | 5.1       | 2.5          | 2016.2         | 240.3        | 16.0      | 10.5         | 71.1      | 2.8          | 546.3     | 60.7         | 4.7       | —            | 136.8     | 137.9        |
| 121  | 5.1       | 2.5          | 2029.9         | 242.0        | 16.1      | 10.5         | 71.8      | 2.8          | 550.2     | 61.1         | 4.8       | —            | 137.7     | 138.8        |
| 122  | 5.2       | 2.5          | 2043.7         | 243.6        | 16.2      | 10.6         | 72.6      | 2.8          | 554.0     | 61.5         | 4.9       | —            | 138.7     | 139.8        |
| 123  | 5.2       | 2.5          | 2057.4         | 245.2        | 16.3      | 10.7         | 73.3      | 2.9          | 557.9     | 62.0         | 4.9       | —            | 139.6     | 140.8        |
| 124  | 5.3       | 2.6          | 2071.0         | 246.9        | 16.5      | 10.8         | 74.1      | 2.9          | 561.7     | 62.4         | 5.0       | —            | 140.6     | 141.8        |
| 125  | 5.3       | 2.6          | 2084.7         | 248.5        | 16.6      | 10.8         | 74.8      | 2.9          | 565.5     | 62.8         | 5.1       | —            | 141.6     | 142.7        |
| 126  | 5.4       | 2.6          | 2098.4         | 250.1        | 16.7      | 10.9         | 75.6      | 2.9          | 569.3     | 63.2         | 5.1       | —            | 142.5     | 143.7        |
| 127  | 5.4       | 2.6          | 2112.0         | 251.7        | 16.8      | 11.0         | 76.4      | 3.0          | 573.2     | 63.7         | 5.2       | —            | 143.5     | 144.7        |
| 128  | 5.5       | 2.6          | 2125.6         | 253.4        | 17.0      | 11.1         | 77.1      | 3.0          | 577.0     | 64.1         | 5.3       | —            | 144.4     | 145.6        |
| 129  | 5.5       | 2.6          | 2139.2         | 255.0        | 17.1      | 11.1         | 77.9      | 3.0          | 580.8     | 64.5         | 5.3       | —            | 145.4     | 146.6        |
| 130  | 5.6       | 2.7          | 2152.8         | 256.6        | 17.2      | 11.2         | 78.7      | 3.1          | 584.6     | 64.9         | 5.4       | —            | 146.4     | 147.5        |
| 131  | 5.6       | 2.7          | 2166.3         | 258.2        | 17.3      | 11.3         | 79.4      | 3.1          | 588.4     | 65.4         | 5.5       | —            | 147.3     | 148.5        |
| 132  | 5.7       | 2.7          | 2179.9         | 259.8        | 17.5      | 11.4         | 80.2      | 3.1          | 592.2     | 65.8         | 5.6       | —            | 148.3     | 149.5        |
| 133  | 5.7       | 2.7          | 2193.4         | 261.4        | 17.6      | 11.4         | 81.0      | 3.2          | 596.0     | 66.2         | 5.6       | —            | 149.2     | 150.4        |
| 134  | 5.7       | 2.7          | 2206.9         | 263.0        | 17.7      | 11.5         | 81.8      | 3.2          | 599.8     | 66.6         | 5.7       | —            | 150.2     | 151.4        |
| 135  | 5.8       | 2.7          | 2220.3         | 264.7        | 17.8      | 11.6         | 82.5      | 3.2          | 603.6     | 67.0         | 5.8       | —            | 151.1     | 152.3        |
| 136  | 5.8       | 2.8          | 2233.8         | 266.3        | 18.0      | 11.6         | 83.3      | 3.2          | 607.3     | 67.5         | 5.9       | —            | 152.1     | 153.3        |
| 137  | 5.9       | 2.8          | 2247.3         | 267.9        | 18.1      | 11.7         | 84.1      | 3.3          | 611.1     | 67.9         | 5.9       | —            | 153.0     | 154.3        |
| 138  | 5.9       | 2.8          | 2260.7         | 269.5        | 18.2      | 11.8         | 84.9      | 3.3          | 614.9     | 68.3         | 6.0       | —            | 153.9     | 155.2        |
| 139  | 6.0       | 2.8          | 2274.1         | 271.1        | 18.3      | 11.9         | 85.7      | 3.3          | 618.7     | 68.7         | 6.1       | —            | 154.9     | 156.2        |
| 140  | 6.0       | 2.8          | 2287.5         | 272.7        | 18.5      | 11.9         | 86.5      | 3.4          | 622.4     | 69.1         | 6.2       | —            | 155.8     | 157.1        |
| 141  | 6.1       | 2.8          | 2300.9         | 274.2        | 18.6      | 12.0         | 87.2      | 3.4          | 626.2     | 69.6         | 6.2       | —            | 156.8     | 158.1        |

| CALCULATED TOTAL RECOVERABLE METALS EFFLUENT LIMITATIONS FOR FRESHWATER DISCHARGES |           |              |                |              |           |              |           |              |           |              |           |              |           |              |
|--|-----------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| Hardness value   | Cadmium   |              | Chromium (III) |              | Copper    |              | Lead      |              | Nickel    |              | Silver    |              | Zinc      |              |
|  | Max Daily | Ave. Monthly | Max Daily      | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly |
| 142  | 6.1       | 2.9          | 2314.2         | 275.8        | 18.7      | 12.1         | 88.0      | 3.4          | 629.9     | 70.0         | 6.3       | —            | 157.7     | 159.0        |
| 143  | 6.2       | 2.9          | 2327.5         | 277.4        | 18.8      | 12.2         | 88.8      | 3.5          | 633.7     | 70.4         | 6.4       | —            | 158.7     | 160.0        |
| 144  | 6.2       | 2.9          | 2340.9         | 279.0        | 18.9      | 12.2         | 89.6      | 3.5          | 637.4     | 70.8         | 6.5       | —            | 159.6     | 160.9        |
| 145  | 6.3       | 2.9          | 2354.2         | 280.6        | 19.1      | 12.3         | 90.4      | 3.5          | 641.2     | 71.2         | 6.5       | —            | 160.5     | 161.9        |
| 146  | 6.3       | 2.9          | 2367.5         | 282.2        | 19.2      | 12.4         | 91.2      | 3.6          | 644.9     | 71.6         | 6.6       | —            | 161.5     | 162.8        |
| 147  | 6.4       | 2.9          | 2380.7         | 283.8        | 19.3      | 12.4         | 92.0      | 3.6          | 648.7     | 72.0         | 6.7       | —            | 162.4     | 163.7        |
| 148  | 6.4       | 2.9          | 2394.0         | 285.4        | 19.4      | 12.5         | 92.8      | 3.6          | 652.4     | 72.5         | 6.8       | —            | 163.3     | 164.7        |
| 149  | 6.5       | 3.0          | 2407.2         | 286.9        | 19.6      | 12.6         | 93.6      | 3.6          | 656.1     | 72.9         | 6.9       | —            | 164.3     | 165.6        |
| 150  | 6.5       | 3.0          | 2420.5         | 288.5        | 19.7      | 12.7         | 94.4      | 3.7          | 659.8     | 73.3         | 6.9       | —            | 165.2     | 166.6        |
| 151  | 6.6       | 3.0          | 2433.7         | 290.1        | 19.8      | 12.7         | 95.2      | 3.7          | 663.6     | 73.7         | 7.0       | —            | 166.2     | 167.5        |
| 152  | 6.6       | 3.0          | 2446.9         | 291.7        | 19.9      | 12.8         | 96.0      | 3.7          | 667.3     | 74.1         | 7.1       | —            | 167.1     | 168.4        |
| 153  | 6.7       | 3.0          | 2460.0         | 293.2        | 20.1      | 12.9         | 96.8      | 3.8          | 671.0     | 74.5         | 7.2       | —            | 168.0     | 169.4        |
| 154  | 6.7       | 3.0          | 2473.2         | 294.8        | 20.2      | 13.0         | 97.6      | 3.8          | 674.7     | 74.9         | 7.3       | —            | 168.9     | 170.3        |
| 155  | 6.8       | 3.1          | 2486.3         | 296.4        | 20.3      | 13.0         | 98.4      | 3.8          | 678.4     | 75.3         | 7.3       | —            | 169.9     | 171.3        |
| 156  | 6.8       | 3.1          | 2499.5         | 297.9        | 20.4      | 13.1         | 99.2      | 3.9          | 682.1     | 75.8         | 7.4       | —            | 170.8     | 172.2        |
| 157  | 6.9       | 3.1          | 2512.6         | 299.5        | 20.6      | 13.2         | 100.0     | 3.9          | 685.8     | 76.2         | 7.5       | —            | 171.7     | 173.1        |
| 158  | 6.9       | 3.1          | 2525.7         | 301.0        | 20.7      | 13.2         | 100.8     | 3.9          | 689.5     | 76.6         | 7.6       | —            | 172.7     | 174.1        |
| 159  | 7.0       | 3.1          | 2538.8         | 302.6        | 20.8      | 13.3         | 101.7     | 4.0          | 693.2     | 77.0         | 7.7       | —            | 173.6     | 175.0        |
| 160  | 7.0       | 3.1          | 2551.8         | 304.2        | 20.9      | 13.4         | 102.5     | 4.0          | 696.9     | 77.4         | 7.7       | —            | 174.5     | 175.9        |
| 161  | 7.1       | 3.1          | 2564.9         | 305.7        | 21.0      | 13.5         | 103.3     | 4.0          | 700.6     | 77.8         | 7.8       | —            | 175.4     | 176.9        |
| 162  | 7.1       | 3.2          | 2577.9         | 307.3        | 21.2      | 13.5         | 104.1     | 4.1          | 704.2     | 78.2         | 7.9       | —            | 176.4     | 177.8        |
| 163  | 7.2       | 3.2          | 2591.0         | 308.8        | 21.3      | 13.6         | 104.9     | 4.1          | 707.9     | 78.6         | 8.0       | —            | 177.3     | 178.7        |
| 164  | 7.2       | 3.2          | 2604.0         | 310.4        | 21.4      | 13.7         | 105.7     | 4.1          | 711.6     | 79.0         | 8.1       | —            | 178.2     | 179.7        |
| 165  | 7.3       | 3.2          | 2617.0         | 311.9        | 21.5      | 13.7         | 106.6     | 4.2          | 715.2     | 79.4         | 8.2       | —            | 179.1     | 180.6        |
| 166  | 7.3       | 3.2          | 2629.9         | 313.5        | 21.7      | 13.8         | 107.4     | 4.2          | 718.9     | 79.8         | 8.2       | —            | 180.0     | 181.5        |
| 167  | 7.4       | 3.2          | 2642.9         | 315.0        | 21.8      | 13.9         | 108.2     | 4.2          | 722.6     | 80.3         | 8.3       | —            | 181.0     | 182.4        |
| 168  | 7.4       | 3.3          | 2655.9         | 316.6        | 21.9      | 14.0         | 109.0     | 4.2          | 726.2     | 80.7         | 8.4       | —            | 181.9     | 183.4        |
| 169  | 7.5       | 3.3          | 2668.8         | 318.1        | 22.0      | 14.0         | 109.9     | 4.3          | 729.9     | 81.1         | 8.5       | —            | 182.8     | 184.3        |
| 170  | 7.5       | 3.3          | 2681.7         | 319.6        | 22.2      | 14.1         | 110.7     | 4.3          | 733.5     | 81.5         | 8.6       | —            | 183.7     | 185.2        |
| 171  | 7.6       | 3.3          | 2694.6         | 321.2        | 22.3      | 14.2         | 111.5     | 4.3          | 737.2     | 81.9         | 8.7       | —            | 184.6     | 186.1        |
| 172  | 7.6       | 3.3          | 2707.5         | 322.7        | 22.4      | 14.2         | 112.4     | 4.4          | 740.8     | 82.3         | 8.8       | —            | 185.5     | 187.0        |
| 173  | 7.7       | 3.3          | 2720.4         | 324.3        | 22.5      | 14.3         | 113.2     | 4.4          | 744.5     | 82.7         | 8.9       | —            | 186.4     | 188.0        |
| 174  | 7.7       | 3.3          | 2733.3         | 325.8        | 22.6      | 14.4         | 114.0     | 4.4          | 748.1     | 83.1         | 8.9       | —            | 187.4     | 188.9        |
| 175  | 7.8       | 3.4          | 2746.2         | 327.3        | 22.8      | 14.4         | 114.9     | 4.5          | 751.8     | 83.5         | 9.0       | —            | 188.3     | 189.8        |
| 176  | 7.8       | 3.4          | 2759.0         | 328.9        | 22.9      | 14.5         | 115.7     | 4.5          | 755.4     | 83.9         | 9.1       | —            | 189.2     | 190.7        |
| 177  | 7.9       | 3.4          | 2771.8         | 330.4        | 23.0      | 14.6         | 116.5     | 4.5          | 759.0     | 84.3         | 9.2       | —            | 190.1     | 191.6        |
| 178  | 7.9       | 3.4          | 2784.7         | 331.9        | 23.1      | 14.7         | 117.4     | 4.6          | 762.6     | 84.7         | 9.3       | —            | 191.0     | 192.6        |
| 179  | 8.0       | 3.4          | 2797.5         | 333.4        | 23.3      | 14.7         | 118.2     | 4.6          | 766.3     | 85.1         | 9.4       | —            | 191.9     | 193.5        |
| 180  | 8.0       | 3.4          | 2810.3         | 335.0        | 23.4      | 14.8         | 119.1     | 4.6          | 769.9     | 85.5         | 9.5       | —            | 192.8     | 194.4        |
| 181  | 8.1       | 3.5          | 2823.0         | 336.5        | 23.5      | 14.9         | 119.9     | 4.7          | 773.5     | 85.9         | 9.6       | —            | 193.7     | 195.3        |
| 182  | 8.1       | 3.5          | 2835.8         | 338.0        | 23.6      | 14.9         | 120.7     | 4.7          | 777.1     | 86.3         | 9.7       | —            | 194.6     | 196.2        |
| 183  | 8.2       | 3.5          | 2848.6         | 339.5        | 23.7      | 15.0         | 121.6     | 4.7          | 780.7     | 86.7         | 9.8       | —            | 195.5     | 197.1        |
| 184  | 8.2       | 3.5          | 2861.3         | 341.1        | 23.9      | 15.1         | 122.4     | 4.8          | 784.3     | 87.1         | 9.8       | —            | 196.4     | 198.0        |
| 185  | 8.3       | 3.5          | 2874.0         | 342.6        | 24.0      | 15.1         | 123.3     | 4.8          | 787.9     | 87.5         | 9.9       | —            | 197.3     | 199.0        |
| 186  | 8.3       | 3.5          | 2886.7         | 344.1        | 24.1      | 15.2         | 124.1     | 4.8          | 791.5     | 87.9         | 10.0      | —            | 198.3     | 199.9        |
| 187  | 8.4       | 3.5          | 2899.5         | 345.6        | 24.2      | 15.3         | 125.0     | 4.9          | 795.1     | 88.3         | 10.1      | —            | 199.2     | 200.8        |
| 188  | 8.4       | 3.6          | 2912.1         | 347.1        | 24.4      | 15.4         | 125.8     | 4.9          | 798.7     | 88.7         | 10.2      | —            | 200.1     | 201.7        |

| CALCULATED TOTAL RECOVERABLE METALS EFFLUENT LIMITATIONS FOR FRESHWATER DISCHARGES |           |              |                |              |           |              |           |              |           |              |           |              |           |              |
|--|-----------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| Hardness value   | Cadmium   |              | Chromium (III) |              | Copper    |              | Lead      |              | Nickel    |              | Silver    |              | Zinc      |              |
|  | Max Daily | Ave. Monthly | Max Daily      | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly |
| 189  | 8.5       | 3.6          | 2924.8         | 348.6        | 24.5      | 15.4         | 126.7     | 4.9          | 802.3     | 89.1         | 10.3      | —            | 201.0     | 202.6        |
| 190  | 8.5       | 3.6          | 2937.5         | 350.1        | 24.6      | 15.5         | 127.5     | 5.0          | 805.9     | 89.5         | 10.4      | —            | 201.9     | 203.5        |
| 191  | 8.6       | 3.6          | 2950.2         | 351.6        | 24.7      | 15.6         | 128.4     | 5.0          | 809.5     | 89.9         | 10.5      | —            | 202.8     | 204.4        |
| 192  | 8.6       | 3.6          | 2962.8         | 353.1        | 24.8      | 15.6         | 129.2     | 5.0          | 813.1     | 90.3         | 10.6      | —            | 203.7     | 205.3        |
| 193  | 8.7       | 3.6          | 2975.4         | 354.7        | 25.0      | 15.7         | 130.1     | 5.1          | 816.7     | 90.7         | 10.7      | —            | 204.6     | 206.2        |
| 194  | 8.7       | 3.6          | 2988.0         | 356.2        | 25.1      | 15.8         | 131.0     | 5.1          | 820.2     | 91.1         | 10.8      | —            | 205.5     | 207.1        |
| 195  | 8.8       | 3.7          | 3000.7         | 357.7        | 25.2      | 15.8         | 131.8     | 5.1          | 823.8     | 91.5         | 10.9      | —            | 206.3     | 208.0        |
| 196  | 8.8       | 3.7          | 3013.3         | 359.2        | 25.3      | 15.9         | 132.7     | 5.2          | 827.4     | 91.9         | 11.0      | —            | 207.2     | 208.9        |
| 197  | 8.9       | 3.7          | 3025.8         | 360.7        | 25.5      | 16.0         | 133.5     | 5.2          | 831.0     | 92.3         | 11.1      | —            | 208.1     | 209.8        |
| 198  | 8.9       | 3.7          | 3038.4         | 362.2        | 25.6      | 16.1         | 134.4     | 5.2          | 834.5     | 92.7         | 11.2      | —            | 209.0     | 210.7        |
| 199  | 9.0       | 3.7          | 3051.0         | 363.7        | 25.7      | 16.1         | 135.3     | 5.3          | 838.1     | 93.1         | 11.3      | —            | 209.9     | 211.6        |
| 200  | 9.0       | 3.7          | 3063.5         | 365.2        | 25.8      | 16.2         | 136.1     | 5.3          | 841.7     | 93.5         | 11.4      | —            | 210.8     | 212.5        |
| 201  | 9.1       | 3.7          | 3076.1         | 366.6        | 25.9      | 16.3         | 137.0     | 5.3          | 845.2     | 93.9         | 11.5      | —            | 211.7     | 213.4        |
| 202  | 9.1       | 3.8          | 3088.6         | 368.1        | 26.1      | 16.3         | 137.9     | 5.4          | 848.8     | 94.3         | 11.6      | —            | 212.6     | 214.3        |
| 203  | 9.2       | 3.8          | 3101.1         | 369.6        | 26.2      | 16.4         | 138.7     | 5.4          | 852.3     | 94.7         | 11.7      | —            | 213.5     | 215.2        |
| 204  | 9.2       | 3.8          | 3113.6         | 371.1        | 26.3      | 16.5         | 139.6     | 5.4          | 855.9     | 95.1         | 11.8      | —            | 214.4     | 216.1        |
| 205  | 9.3       | 3.8          | 3126.1         | 372.6        | 26.4      | 16.5         | 140.5     | 5.5          | 859.4     | 95.5         | 11.9      | —            | 215.3     | 217.0        |
| 206  | 9.3       | 3.8          | 3138.6         | 374.1        | 26.6      | 16.6         | 141.4     | 5.5          | 863.0     | 95.8         | 12.0      | —            | 216.2     | 217.9        |
| 207  | 9.4       | 3.8          | 3151.1         | 375.6        | 26.7      | 16.7         | 142.2     | 5.5          | 866.5     | 96.2         | 12.1      | —            | 217.1     | 218.8        |
| 208  | 9.4       | 3.8          | 3163.5         | 377.1        | 26.8      | 16.7         | 143.1     | 5.6          | 870.1     | 96.6         | 12.2      | —            | 217.9     | 219.7        |
| 209  | 9.5       | 3.9          | 3176.0         | 378.6        | 26.9      | 16.8         | 144.0     | 5.6          | 873.6     | 97.0         | 12.3      | —            | 218.8     | 220.6        |
| 210  | 9.5       | 3.9          | 3188.4         | 380.0        | 27.0      | 16.9         | 144.9     | 5.6          | 877.1     | 97.4         | 12.4      | —            | 219.7     | 221.5        |
| 211  | 9.6       | 3.9          | 3200.9         | 381.5        | 27.2      | 17.0         | 145.7     | 5.7          | 880.7     | 97.8         | 12.5      | —            | 220.6     | 222.4        |
| 212  | 9.6       | 3.9          | 3213.3         | 383.0        | 27.3      | 17.0         | 146.6     | 5.7          | 884.2     | 98.2         | 12.6      | —            | 221.5     | 223.3        |
| 213  | 9.7       | 3.9          | 3225.7         | 384.5        | 27.4      | 17.1         | 147.5     | 5.7          | 887.7     | 98.6         | 12.7      | —            | 222.4     | 224.2        |
| 214  | 9.7       | 3.9          | 3238.1         | 386.0        | 27.5      | 17.2         | 148.4     | 5.8          | 891.2     | 99.0         | 12.8      | —            | 223.3     | 225.1        |
| 215  | 9.8       | 4.0          | 3250.5         | 387.4        | 27.6      | 17.2         | 149.3     | 5.8          | 894.8     | 99.4         | 12.9      | —            | 224.1     | 226.0        |
| 216  | 9.8       | 4.0          | 3262.8         | 388.9        | 27.8      | 17.3         | 150.2     | 5.9          | 898.3     | 99.8         | 13.0      | —            | 225.0     | 226.9        |
| 217  | 9.9       | 4.0          | 3275.2         | 390.4        | 27.9      | 17.4         | 151.0     | 5.9          | 901.8     | 100.2        | 13.1      | —            | 225.9     | 227.8        |
| 218  | 10.0      | 4.0          | 3287.6         | 391.9        | 28.0      | 17.4         | 151.9     | 5.9          | 905.3     | 100.6        | 13.2      | —            | 226.8     | 228.6        |
| 219  | 10.0      | 4.0          | 3299.9         | 393.3        | 28.1      | 17.5         | 152.8     | 6.0          | 908.8     | 100.9        | 13.3      | —            | 227.7     | 229.5        |
| 220  | 10.1      | 4.0          | 3312.2         | 394.8        | 28.2      | 17.6         | 153.7     | 6.0          | 912.3     | 101.3        | 13.4      | —            | 228.6     | 230.4        |
| 221  | 10.1      | 4.0          | 3324.6         | 396.3        | 28.4      | 17.6         | 154.6     | 6.0          | 915.8     | 101.7        | 13.5      | —            | 229.4     | 231.3        |
| 222  | 10.2      | 4.1          | 3336.9         | 397.7        | 28.5      | 17.7         | 155.5     | 6.1          | 919.3     | 102.1        | 13.6      | —            | 230.3     | 232.2        |
| 223  | 10.2      | 4.1          | 3349.2         | 399.2        | 28.6      | 17.8         | 156.4     | 6.1          | 922.8     | 102.5        | 13.7      | —            | 231.2     | 233.1        |
| 224  | 10.3      | 4.1          | 3361.5         | 400.7        | 28.7      | 17.8         | 157.3     | 6.1          | 926.3     | 102.9        | 13.8      | —            | 232.1     | 234.0        |
| 225  | 10.3      | 4.1          | 3373.8         | 402.1        | 28.9      | 17.9         | 158.2     | 6.2          | 929.8     | 103.3        | 13.9      | —            | 232.9     | 234.9        |
| 226  | 10.4      | 4.1          | 3386.0         | 403.6        | 29.0      | 18.0         | 159.1     | 6.2          | 933.3     | 103.7        | 14.0      | —            | 233.8     | 235.7        |
| 227  | 10.4      | 4.1          | 3398.3         | 405.1        | 29.1      | 18.0         | 160.0     | 6.2          | 936.8     | 104.1        | 14.1      | —            | 234.7     | 236.6        |
| 228  | 10.5      | 4.1          | 3410.6         | 406.5        | 29.2      | 18.1         | 160.9     | 6.3          | 940.3     | 104.4        | 14.2      | —            | 235.6     | 237.5        |
| 229  | 10.5      | 4.2          | 3422.8         | 408.0        | 29.3      | 18.2         | 161.8     | 6.3          | 943.8     | 104.8        | 14.3      | —            | 236.5     | 238.4        |
| 230  | 10.6      | 4.2          | 3435.1         | 409.4        | 29.5      | 18.2         | 162.7     | 6.3          | 947.3     | 105.2        | 14.5      | —            | 237.3     | 239.3        |
| 231  | 10.6      | 4.2          | 3447.3         | 410.9        | 29.6      | 18.3         | 163.6     | 6.4          | 950.8     | 105.6        | 14.6      | —            | 238.2     | 240.1        |
| 232  | 10.7      | 4.2          | 3459.5         | 412.4        | 29.7      | 18.4         | 164.5     | 6.4          | 954.3     | 106.0        | 14.7      | —            | 239.1     | 241.0        |
| 233  | 10.7      | 4.2          | 3471.7         | 413.8        | 29.8      | 18.5         | 165.4     | 6.4          | 957.7     | 106.4        | 14.8      | —            | 239.9     | 241.9        |
| 234  | 10.8      | 4.2          | 3483.9         | 415.3        | 29.9      | 18.5         | 166.3     | 6.5          | 961.2     | 106.8        | 14.9      | —            | 240.8     | 242.8        |
| 235  | 10.8      | 4.2          | 3496.1         | 416.7        | 30.1      | 18.6         | 167.2     | 6.5          | 964.7     | 107.1        | 15.0      | —            | 241.7     | 243.7        |

| CALCULATED TOTAL RECOVERABLE METALS EFFLUENT LIMITATIONS FOR FRESHWATER DISCHARGES |           |              |                |              |           |              |           |              |           |              |           |              |           |              |
|--|-----------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| Hardness value   | Cadmium   |              | Chromium (III) |              | Copper    |              | Lead      |              | Nickel    |              | Silver    |              | Zinc      |              |
|  | Max Daily | Ave. Monthly | Max Daily      | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly |
| 236  | 10.9      | 4.2          | 3508.3         | 418.2        | 30.2      | 18.7         | 168.1     | 6.5          | 968.2     | 107.5        | 15.1      | —            | 242.6     | 244.5        |
| 237  | 10.9      | 4.3          | 3520.4         | 419.6        | 30.3      | 18.7         | 169.0     | 6.6          | 971.6     | 107.9        | 15.2      | —            | 243.4     | 245.4        |
| 238  | 11.0      | 4.3          | 3532.6         | 421.1        | 30.4      | 18.8         | 169.9     | 6.6          | 975.1     | 108.3        | 15.3      | —            | 244.3     | 246.3        |
| 239  | 11.0      | 4.3          | 3544.8         | 422.5        | 30.5      | 18.9         | 170.8     | 6.7          | 978.6     | 108.7        | 15.4      | —            | 245.2     | 247.2        |
| 240  | 11.1      | 4.3          | 3556.9         | 424.0        | 30.7      | 18.9         | 171.7     | 6.7          | 982.0     | 109.1        | 15.6      | —            | 246.0     | 248.1        |
| 241  | 11.1      | 4.3          | 3569.0         | 425.4        | 30.8      | 19.0         | 172.6     | 6.7          | 985.5     | 109.5        | 15.7      | —            | 246.9     | 248.9        |
| 242  | 11.2      | 4.3          | 3581.2         | 426.9        | 30.9      | 19.1         | 173.5     | 6.8          | 988.9     | 109.8        | 15.8      | —            | 247.8     | 249.8        |
| 243  | 11.2      | 4.3          | 3593.3         | 428.3        | 31.0      | 19.1         | 174.4     | 6.8          | 992.4     | 110.2        | 15.9      | —            | 248.6     | 250.7        |
| 244  | 11.3      | 4.4          | 3605.4         | 429.7        | 31.1      | 19.2         | 175.4     | 6.8          | 995.9     | 110.6        | 16.0      | —            | 249.5     | 251.6        |
| 245  | 11.4      | 4.4          | 3617.5         | 431.2        | 31.3      | 19.3         | 176.3     | 6.9          | 999.3     | 111.0        | 16.1      | —            | 250.4     | 252.4        |
| 246  | 11.4      | 4.4          | 3629.6         | 432.6        | 31.4      | 19.3         | 177.2     | 6.9          | 1002.8    | 111.4        | 16.2      | —            | 251.2     | 253.3        |
| 247  | 11.5      | 4.4          | 3641.6         | 434.1        | 31.5      | 19.4         | 178.1     | 6.9          | 1006.2    | 111.8        | 16.3      | —            | 252.1     | 254.2        |
| 248  | 11.5      | 4.4          | 3653.7         | 435.5        | 31.6      | 19.5         | 179.0     | 7.0          | 1009.6    | 112.1        | 16.5      | —            | 253.0     | 255.0        |
| 249  | 11.6      | 4.4          | 3665.8         | 436.9        | 31.7      | 19.5         | 179.9     | 7.0          | 1013.1    | 112.5        | 16.6      | —            | 253.8     | 255.9        |
| 250  | 11.6      | 4.4          | 3677.8         | 438.4        | 31.9      | 19.6         | 180.9     | 7.0          | 1016.5    | 112.9        | 16.7      | —            | 254.7     | 256.8        |
| 251  | 11.7      | 4.5          | 3689.9         | 439.8        | 32.0      | 19.7         | 181.8     | 7.1          | 1020.0    | 113.3        | 16.8      | —            | 255.6     | 257.7        |
| 252  | 11.7      | 4.5          | 3701.9         | 441.2        | 32.1      | 19.7         | 182.7     | 7.1          | 1023.4    | 113.7        | 16.9      | —            | 256.4     | 258.5        |
| 253  | 11.8      | 4.5          | 3713.9         | 442.7        | 32.2      | 19.8         | 183.6     | 7.2          | 1026.8    | 114.1        | 17.0      | —            | 257.3     | 259.4        |
| 254  | 11.8      | 4.5          | 3725.9         | 444.1        | 32.3      | 19.9         | 184.6     | 7.2          | 1030.3    | 114.4        | 17.1      | —            | 258.1     | 260.3        |
| 255  | 11.9      | 4.5          | 3738.0         | 445.5        | 32.5      | 19.9         | 185.5     | 7.2          | 1033.7    | 114.8        | 17.3      | —            | 259.0     | 261.1        |
| 256  | 11.9      | 4.5          | 3750.0         | 447.0        | 32.6      | 20.0         | 186.4     | 7.3          | 1037.1    | 115.2        | 17.4      | —            | 259.9     | 262.0        |
| 257  | 12.0      | 4.5          | 3762.0         | 448.4        | 32.7      | 20.1         | 187.3     | 7.3          | 1040.6    | 115.6        | 17.5      | —            | 260.7     | 262.9        |
| 258  | 12.0      | 4.6          | 3773.9         | 449.8        | 32.8      | 20.1         | 188.3     | 7.3          | 1044.0    | 116.0        | 17.6      | —            | 261.6     | 263.7        |
| 259  | 12.1      | 4.6          | 3785.9         | 451.3        | 32.9      | 20.2         | 189.2     | 7.4          | 1047.4    | 116.3        | 17.7      | —            | 262.4     | 264.6        |
| 260  | 12.1      | 4.6          | 3797.9         | 452.7        | 33.1      | 20.3         | 190.1     | 7.4          | 1050.8    | 116.7        | 17.8      | —            | 263.3     | 265.5        |
| 261  | 12.2      | 4.6          | 3809.8         | 454.1        | 33.2      | 20.3         | 191.1     | 7.4          | 1054.2    | 117.1        | 18.0      | —            | 264.2     | 266.3        |
| 262  | 12.2      | 4.6          | 3821.8         | 455.5        | 33.3      | 20.4         | 192.0     | 7.5          | 1057.7    | 117.5        | 18.1      | —            | 265.0     | 267.2        |
| 263  | 12.3      | 4.6          | 3833.7         | 457.0        | 33.4      | 20.5         | 192.9     | 7.5          | 1061.1    | 117.9        | 18.2      | —            | 265.9     | 268.1        |
| 264  | 12.4      | 4.6          | 3845.7         | 458.4        | 33.5      | 20.5         | 193.9     | 7.6          | 1064.5    | 118.2        | 18.3      | —            | 266.7     | 268.9        |
| 265  | 12.4      | 4.7          | 3857.6         | 459.8        | 33.7      | 20.6         | 194.8     | 7.6          | 1067.9    | 118.6        | 18.4      | —            | 267.6     | 269.8        |
| 266  | 12.5      | 4.7          | 3869.5         | 461.2        | 33.8      | 20.7         | 195.7     | 7.6          | 1071.3    | 119.0        | 18.6      | —            | 268.4     | 270.6        |
| 267  | 12.5      | 4.7          | 3881.4         | 462.6        | 33.9      | 20.7         | 196.7     | 7.7          | 1074.7    | 119.4        | 18.7      | —            | 269.3     | 271.5        |
| 268  | 12.6      | 4.7          | 3893.3         | 464.1        | 34.0      | 20.8         | 197.6     | 7.7          | 1078.1    | 119.7        | 18.8      | —            | 270.2     | 272.4        |
| 269  | 12.6      | 4.7          | 3905.2         | 465.5        | 34.1      | 20.9         | 198.5     | 7.7          | 1081.5    | 120.1        | 18.9      | —            | 271.0     | 273.2        |
| 270  | 12.7      | 4.7          | 3917.1         | 466.9        | 34.3      | 20.9         | 199.5     | 7.8          | 1084.9    | 120.5        | 19.0      | —            | 271.9     | 274.1        |
| 271  | 12.7      | 4.7          | 3929.0         | 468.3        | 34.4      | 21.0         | 200.4     | 7.8          | 1088.3    | 120.9        | 19.2      | —            | 272.7     | 274.9        |
| 272  | 12.8      | 4.8          | 3940.9         | 469.7        | 34.5      | 21.1         | 201.4     | 7.8          | 1091.7    | 121.3        | 19.3      | —            | 273.6     | 275.8        |
| 273  | 12.8      | 4.8          | 3952.7         | 471.1        | 34.6      | 21.1         | 202.3     | 7.9          | 1095.1    | 121.6        | 19.4      | —            | 274.4     | 276.7        |
| 274  | 12.9      | 4.8          | 3964.6         | 472.6        | 34.7      | 21.2         | 203.3     | 7.9          | 1098.5    | 122.0        | 19.5      | —            | 275.3     | 277.5        |
| 275  | 12.9      | 4.8          | 3976.4         | 474.0        | 34.9      | 21.3         | 204.2     | 8.0          | 1101.9    | 122.4        | 19.7      | —            | 276.1     | 278.4        |
| 276  | 13.0      | 4.8          | 3988.3         | 475.4        | 35.0      | 21.3         | 205.1     | 8.0          | 1105.3    | 122.8        | 19.8      | —            | 277.0     | 279.2        |
| 277  | 13.0      | 4.8          | 4000.1         | 476.8        | 35.1      | 21.4         | 206.1     | 8.0          | 1108.7    | 123.1        | 19.9      | —            | 277.8     | 280.1        |
| 278  | 13.1      | 4.8          | 4011.9         | 478.2        | 35.2      | 21.5         | 207.0     | 8.1          | 1112.1    | 123.5        | 20.0      | —            | 278.7     | 281.0        |
| 279  | 13.1      | 4.8          | 4023.7         | 479.6        | 35.3      | 21.5         | 208.0     | 8.1          | 1115.4    | 123.9        | 20.1      | —            | 279.5     | 281.8        |
| 280  | 13.2      | 4.9          | 4035.5         | 481.0        | 35.5      | 21.6         | 208.9     | 8.1          | 1118.8    | 124.3        | 20.3      | —            | 280.4     | 282.7        |
| 281  | 13.3      | 4.9          | 4047.3         | 482.4        | 35.6      | 21.7         | 209.9     | 8.2          | 1122.2    | 124.6        | 20.4      | —            | 281.2     | 283.5        |
| 282  | 13.3      | 4.9          | 4059.1         | 483.8        | 35.7      | 21.7         | 210.8     | 8.2          | 1125.6    | 125.0        | 20.5      | —            | 282.1     | 284.4        |

| CALCULATED TOTAL RECOVERABLE METALS EFFLUENT LIMITATIONS FOR FRESHWATER DISCHARGES |           |              |                |              |           |              |           |              |           |              |           |              |           |              |
|--|-----------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| Hardness value   | Cadmium   |              | Chromium (III) |              | Copper    |              | Lead      |              | Nickel    |              | Silver    |              | Zinc      |              |
|  | Max Daily | Ave. Monthly | Max Daily      | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly |
| 283  | 13.4      | 4.9          | 4070.9         | 485.2        | 35.8      | 21.8         | 211.8     | 8.3          | 1129.0    | 125.4        | 20.6      | —            | 282.9     | 285.2        |
| 284  | 13.4      | 4.9          | 4082.7         | 486.6        | 35.9      | 21.9         | 212.7     | 8.3          | 1132.3    | 125.8        | 20.8      | —            | 283.8     | 286.1        |
| 285  | 13.5      | 4.9          | 4094.5         | 488.0        | 36.1      | 21.9         | 213.7     | 8.3          | 1135.7    | 126.1        | 20.9      | —            | 284.6     | 286.9        |
| 286  | 13.5      | 4.9          | 4106.2         | 489.4        | 36.2      | 22.0         | 214.7     | 8.4          | 1139.1    | 126.5        | 21.0      | —            | 285.5     | 287.8        |
| 287  | 13.6      | 5.0          | 4118.0         | 490.8        | 36.3      | 22.0         | 215.6     | 8.4          | 1142.4    | 126.9        | 21.2      | —            | 286.3     | 288.6        |
| 288  | 13.6      | 5.0          | 4129.7         | 492.2        | 36.4      | 22.1         | 216.6     | 8.4          | 1145.8    | 127.3        | 21.3      | —            | 287.1     | 289.5        |
| 289  | 13.7      | 5.0          | 4141.5         | 493.6        | 36.5      | 22.2         | 217.5     | 8.5          | 1149.2    | 127.6        | 21.4      | —            | 288.0     | 290.3        |
| 290  | 13.7      | 5.0          | 4153.2         | 495.0        | 36.6      | 22.2         | 218.5     | 8.5          | 1152.5    | 128.0        | 21.5      | —            | 288.8     | 291.2        |
| 291  | 13.8      | 5.0          | 4164.9         | 496.4        | 36.8      | 22.3         | 219.4     | 8.6          | 1155.9    | 128.4        | 21.7      | —            | 289.7     | 292.0        |
| 292  | 13.8      | 5.0          | 4176.6         | 497.8        | 36.9      | 22.4         | 220.4     | 8.6          | 1159.3    | 128.8        | 21.8      | —            | 290.5     | 292.9        |
| 293  | 13.9      | 5.0          | 4188.3         | 499.2        | 37.0      | 22.4         | 221.4     | 8.6          | 1162.6    | 129.1        | 21.9      | —            | 291.4     | 293.7        |
| 294  | 13.9      | 5.1          | 4200.1         | 500.6        | 37.1      | 22.5         | 222.3     | 8.7          | 1166.0    | 129.5        | 22.0      | —            | 292.2     | 294.6        |
| 295  | 14.0      | 5.1          | 4211.7         | 502.0        | 37.2      | 22.6         | 223.3     | 8.7          | 1169.3    | 129.9        | 22.2      | —            | 293.0     | 295.4        |
| 296  | 14.1      | 5.1          | 4223.4         | 503.4        | 37.4      | 22.6         | 224.3     | 8.7          | 1172.7    | 130.2        | 22.3      | —            | 293.9     | 296.3        |
| 297  | 14.1      | 5.1          | 4235.1         | 504.8        | 37.5      | 22.7         | 225.2     | 8.8          | 1176.0    | 130.6        | 22.4      | —            | 294.7     | 297.1        |
| 298  | 14.2      | 5.1          | 4246.8         | 506.2        | 37.6      | 22.8         | 226.2     | 8.8          | 1179.4    | 131.0        | 22.6      | —            | 295.6     | 298.0        |
| 299  | 14.2      | 5.1          | 4258.5         | 507.6        | 37.7      | 22.8         | 227.1     | 8.9          | 1182.7    | 131.4        | 22.7      | —            | 296.4     | 298.8        |
| 300  | 14.3      | 5.1          | 4270.1         | 509.0        | 37.8      | 22.9         | 228.1     | 8.9          | 1186.1    | 131.7        | 22.8      | —            | 297.2     | 299.7        |
| 301  | 14.3      | 5.1          | 4281.8         | 510.4        | 38.0      | 23.0         | 229.1     | 8.9          | 1189.4    | 132.1        | 23.0      | —            | 298.1     | 300.5        |
| 302  | 14.4      | 5.2          | 4293.4         | 511.8        | 38.1      | 23.0         | 230.1     | 9.0          | 1192.8    | 132.5        | 23.1      | —            | 298.9     | 301.4        |
| 303  | 14.4      | 5.2          | 4305.1         | 513.1        | 38.2      | 23.1         | 231.0     | 9.0          | 1196.1    | 132.8        | 23.2      | —            | 299.8     | 302.2        |
| 304  | 14.5      | 5.2          | 4316.7         | 514.5        | 38.3      | 23.2         | 232.0     | 9.0          | 1199.4    | 133.2        | 23.4      | —            | 300.6     | 303.1        |
| 305  | 14.5      | 5.2          | 4328.3         | 515.9        | 38.4      | 23.2         | 233.0     | 9.1          | 1202.8    | 133.6        | 23.5      | —            | 301.4     | 303.9        |
| 306  | 14.6      | 5.2          | 4339.9         | 517.3        | 38.5      | 23.3         | 233.9     | 9.1          | 1206.1    | 134.0        | 23.6      | —            | 302.3     | 304.8        |
| 307  | 14.6      | 5.2          | 4351.6         | 518.7        | 38.7      | 23.4         | 234.9     | 9.2          | 1209.4    | 134.3        | 23.8      | —            | 303.1     | 305.6        |
| 308  | 14.7      | 5.2          | 4363.2         | 520.1        | 38.8      | 23.4         | 235.9     | 9.2          | 1212.8    | 134.7        | 23.9      | —            | 304.0     | 306.4        |
| 309  | 14.7      | 5.3          | 4374.8         | 521.4        | 38.9      | 23.5         | 236.9     | 9.2          | 1216.1    | 135.1        | 24.0      | —            | 304.8     | 307.3        |
| 310  | 14.8      | 5.3          | 4386.3         | 522.8        | 39.0      | 23.5         | 237.8     | 9.3          | 1219.4    | 135.4        | 24.2      | —            | 305.6     | 308.1        |
| 311  | 14.9      | 5.3          | 4397.9         | 524.2        | 39.1      | 23.6         | 238.8     | 9.3          | 1222.8    | 135.8        | 24.3      | —            | 306.5     | 309.0        |
| 312  | 14.9      | 5.3          | 4409.5         | 525.6        | 39.3      | 23.7         | 239.8     | 9.3          | 1226.1    | 136.2        | 24.4      | —            | 307.3     | 309.8        |
| 313  | 15.0      | 5.3          | 4421.1         | 527.0        | 39.4      | 23.7         | 240.8     | 9.4          | 1229.4    | 136.5        | 24.6      | —            | 308.1     | 310.6        |
| 314  | 15.0      | 5.3          | 4432.6         | 528.3        | 39.5      | 23.8         | 241.8     | 9.4          | 1232.7    | 136.9        | 24.7      | —            | 309.0     | 311.5        |
| 315  | 15.1      | 5.3          | 4444.2         | 529.7        | 39.6      | 23.9         | 242.7     | 9.5          | 1236.0    | 137.3        | 24.8      | —            | 309.8     | 312.3        |
| 316  | 15.1      | 5.3          | 4455.8         | 531.1        | 39.7      | 23.9         | 243.7     | 9.5          | 1239.4    | 137.7        | 25.0      | —            | 310.6     | 313.2        |
| 317  | 15.2      | 5.4          | 4467.3         | 532.5        | 39.9      | 24.0         | 244.7     | 9.5          | 1242.7    | 138.0        | 25.1      | —            | 311.5     | 314.0        |
| 318  | 15.2      | 5.4          | 4478.8         | 533.9        | 40.0      | 24.1         | 245.7     | 9.6          | 1246.0    | 138.4        | 25.2      | —            | 312.3     | 314.8        |
| 319  | 15.3      | 5.4          | 4490.4         | 535.2        | 40.1      | 24.1         | 246.7     | 9.6          | 1249.3    | 138.8        | 25.4      | —            | 313.1     | 315.7        |
| 320  | 15.3      | 5.4          | 4501.9         | 536.6        | 40.2      | 24.2         | 247.6     | 9.7          | 1252.6    | 139.1        | 25.5      | —            | 314.0     | 316.5        |
| 321  | 15.4      | 5.4          | 4513.4         | 538.0        | 40.3      | 24.3         | 248.6     | 9.7          | 1255.9    | 139.5        | 25.6      | —            | 314.8     | 317.4        |
| 322  | 15.5      | 5.4          | 4524.9         | 539.3        | 40.4      | 24.3         | 249.6     | 9.7          | 1259.2    | 139.9        | 25.8      | —            | 315.6     | 318.2        |
| 323  | 15.5      | 5.4          | 4536.4         | 540.7        | 40.6      | 24.4         | 250.6     | 9.8          | 1262.6    | 140.2        | 25.9      | —            | 316.4     | 319.0        |
| 324  | 15.6      | 5.5          | 4547.9         | 542.1        | 40.7      | 24.5         | 251.6     | 9.8          | 1265.9    | 140.6        | 26.1      | —            | 317.3     | 319.9        |
| 325  | 15.6      | 5.5          | 4559.4         | 543.5        | 40.8      | 24.5         | 252.6     | 9.8          | 1269.2    | 141.0        | 26.2      | —            | 318.1     | 320.7        |
| 326  | 15.7      | 5.5          | 4570.9         | 544.8        | 40.9      | 24.6         | 253.6     | 9.9          | 1272.5    | 141.3        | 26.3      | —            | 318.9     | 321.5        |
| 327  | 15.7      | 5.5          | 4582.4         | 546.2        | 41.0      | 24.6         | 254.6     | 9.9          | 1275.8    | 141.7        | 26.5      | —            | 319.8     | 322.4        |
| 328  | 15.8      | 5.5          | 4593.9         | 547.6        | 41.2      | 24.7         | 255.6     | 10.0         | 1279.1    | 142.1        | 26.6      | —            | 320.6     | 323.2        |
| 329  | 15.8      | 5.5          | 4605.3         | 548.9        | 41.3      | 24.8         | 256.5     | 10.0         | 1282.4    | 142.4        | 26.8      | —            | 321.4     | 324.1        |

| CALCULATED TOTAL RECOVERABLE METALS EFFLUENT LIMITATIONS FOR FRESHWATER DISCHARGES |           |              |                |              |           |              |           |              |           |              |           |              |           |              |
|--|-----------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| Hardness value   | Cadmium   |              | Chromium (III) |              | Copper    |              | Lead      |              | Nickel    |              | Silver    |              | Zinc      |              |
|  | Max Daily | Ave. Monthly | Max Daily      | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly |
| 330  | 15.9      | 5.5          | 4616.8         | 550.3        | 41.4      | 24.8         | 257.5     | 10.0         | 1285.7    | 142.8        | 26.9      | —            | 322.2     | 324.9        |
| 331  | 15.9      | 5.5          | 4628.3         | 551.7        | 41.5      | 24.9         | 258.5     | 10.1         | 1289.0    | 143.2        | 27.0      | —            | 323.1     | 325.7        |
| 332  | 16.0      | 5.6          | 4639.7         | 553.0        | 41.6      | 25.0         | 259.5     | 10.1         | 1292.3    | 143.5        | 27.2      | —            | 323.9     | 326.6        |
| 333  | 16.0      | 5.6          | 4651.1         | 554.4        | 41.7      | 25.0         | 260.5     | 10.2         | 1295.5    | 143.9        | 27.3      | —            | 324.7     | 327.4        |
| 334  | 16.1      | 5.6          | 4662.6         | 555.8        | 41.9      | 25.1         | 261.5     | 10.2         | 1298.8    | 144.3        | 27.5      | —            | 325.6     | 328.2        |
| 335  | 16.2      | 5.6          | 4674.0         | 557.1        | 42.0      | 25.2         | 262.5     | 10.2         | 1302.1    | 144.6        | 27.6      | —            | 326.4     | 329.1        |
| 336  | 16.2      | 5.6          | 4685.4         | 558.5        | 42.1      | 25.2         | 263.5     | 10.3         | 1305.4    | 145.0        | 27.7      | —            | 327.2     | 329.9        |
| 337  | 16.3      | 5.6          | 4696.9         | 559.8        | 42.2      | 25.3         | 264.5     | 10.3         | 1308.7    | 145.4        | 27.9      | —            | 328.0     | 330.7        |
| 338  | 16.3      | 5.6          | 4708.3         | 561.2        | 42.3      | 25.4         | 265.5     | 10.3         | 1312.0    | 145.7        | 28.0      | —            | 328.9     | 331.5        |
| 339  | 16.4      | 5.6          | 4719.7         | 562.6        | 42.5      | 25.4         | 266.5     | 10.4         | 1315.3    | 146.1        | 28.2      | —            | 329.7     | 332.4        |
| 340  | 16.4      | 5.7          | 4731.1         | 563.9        | 42.6      | 25.5         | 267.5     | 10.4         | 1318.5    | 146.4        | 28.3      | —            | 330.5     | 333.2        |
| 341  | 16.5      | 5.7          | 4742.5         | 565.3        | 42.7      | 25.5         | 268.5     | 10.5         | 1321.8    | 146.8        | 28.5      | —            | 331.3     | 334.0        |
| 342  | 16.5      | 5.7          | 4753.8         | 566.6        | 42.8      | 25.6         | 269.5     | 10.5         | 1325.1    | 147.2        | 28.6      | —            | 332.2     | 334.9        |
| 343  | 16.6      | 5.7          | 4765.2         | 568.0        | 42.9      | 25.7         | 270.5     | 10.5         | 1328.4    | 147.5        | 28.7      | —            | 333.0     | 335.7        |
| 344  | 16.6      | 5.7          | 4776.6         | 569.3        | 43.0      | 25.7         | 271.5     | 10.6         | 1331.7    | 147.9        | 28.9      | —            | 333.8     | 336.5        |
| 345  | 16.7      | 5.7          | 4788.0         | 570.7        | 43.2      | 25.8         | 272.5     | 10.6         | 1334.9    | 148.3        | 29.0      | —            | 334.6     | 337.4        |
| 346  | 16.8      | 5.7          | 4799.3         | 572.1        | 43.3      | 25.9         | 273.5     | 10.7         | 1338.2    | 148.6        | 29.2      | —            | 335.4     | 338.2        |
| 347  | 16.8      | 5.8          | 4810.7         | 573.4        | 43.4      | 25.9         | 274.5     | 10.7         | 1341.5    | 149.0        | 29.3      | —            | 336.3     | 339.0        |
| 348  | 16.9      | 5.8          | 4822.0         | 574.8        | 43.5      | 26.0         | 275.6     | 10.7         | 1344.7    | 149.4        | 29.5      | —            | 337.1     | 339.8        |
| 349  | 16.9      | 5.8          | 4833.4         | 576.1        | 43.6      | 26.1         | 276.6     | 10.8         | 1348.0    | 149.7        | 29.6      | —            | 337.9     | 340.7        |
| 350  | 17.0      | 5.8          | 4844.7         | 577.5        | 43.8      | 26.1         | 277.6     | 10.8         | 1351.3    | 150.1        | 29.8      | —            | 338.7     | 341.5        |
| 351  | 17.0      | 5.8          | 4856.1         | 578.8        | 43.9      | 26.2         | 278.6     | 10.9         | 1354.5    | 150.4        | 29.9      | —            | 339.5     | 342.3        |
| 352  | 17.1      | 5.8          | 4867.4         | 580.2        | 44.0      | 26.2         | 279.6     | 10.9         | 1357.8    | 150.8        | 30.1      | —            | 340.4     | 343.1        |
| 353  | 17.1      | 5.8          | 4878.7         | 581.5        | 44.1      | 26.3         | 280.6     | 10.9         | 1361.1    | 151.2        | 30.2      | —            | 341.2     | 344.0        |
| 354  | 17.2      | 5.8          | 4890.0         | 582.9        | 44.2      | 26.4         | 281.6     | 11.0         | 1364.3    | 151.5        | 30.3      | —            | 342.0     | 344.8        |
| 355  | 17.2      | 5.9          | 4901.3         | 584.2        | 44.3      | 26.4         | 282.6     | 11.0         | 1367.6    | 151.9        | 30.5      | —            | 342.8     | 345.6        |
| 356  | 17.3      | 5.9          | 4912.6         | 585.6        | 44.5      | 26.5         | 283.6     | 11.1         | 1370.9    | 152.3        | 30.6      | —            | 343.6     | 346.4        |
| 357  | 17.4      | 5.9          | 4923.9         | 586.9        | 44.6      | 26.6         | 284.7     | 11.1         | 1374.1    | 152.6        | 30.8      | —            | 344.5     | 347.3        |
| 358  | 17.4      | 5.9          | 4935.2         | 588.3        | 44.7      | 26.6         | 285.7     | 11.1         | 1377.4    | 153.0        | 30.9      | —            | 345.3     | 348.1        |
| 359  | 17.5      | 5.9          | 4946.5         | 589.6        | 44.8      | 26.7         | 286.7     | 11.2         | 1380.6    | 153.3        | 31.1      | —            | 346.1     | 348.9        |
| 360  | 17.5      | 5.9          | 4957.8         | 590.9        | 44.9      | 26.8         | 287.7     | 11.2         | 1383.9    | 153.7        | 31.2      | —            | 346.9     | 349.7        |
| 361  | 17.6      | 5.9          | 4969.1         | 592.3        | 45.0      | 26.8         | 288.7     | 11.3         | 1387.1    | 154.1        | 31.4      | —            | 347.7     | 350.6        |
| 362  | 17.6      | 5.9          | 4980.4         | 593.6        | 45.2      | 26.9         | 289.7     | 11.3         | 1390.4    | 154.4        | 31.5      | —            | 348.5     | 351.4        |
| 363  | 17.7      | 6.0          | 4991.6         | 595.0        | 45.3      | 26.9         | 290.8     | 11.3         | 1393.6    | 154.8        | 31.7      | —            | 349.4     | 352.2        |
| 364  | 17.7      | 6.0          | 5002.9         | 596.3        | 45.4      | 27.0         | 291.8     | 11.4         | 1396.9    | 155.1        | 31.8      | —            | 350.2     | 353.0        |
| 365  | 17.8      | 6.0          | 5014.1         | 597.7        | 45.5      | 27.1         | 292.8     | 11.4         | 1400.1    | 155.5        | 32.0      | —            | 351.0     | 353.9        |
| 366  | 17.9      | 6.0          | 5025.4         | 599.0        | 45.6      | 27.1         | 293.8     | 11.5         | 1403.4    | 155.9        | 32.1      | —            | 351.8     | 354.7        |
| 367  | 17.9      | 6.0          | 5036.6         | 600.3        | 45.8      | 27.2         | 294.8     | 11.5         | 1406.6    | 156.2        | 32.3      | —            | 352.6     | 355.5        |
| 368  | 18.0      | 6.0          | 5047.9         | 601.7        | 45.9      | 27.3         | 295.9     | 11.5         | 1409.8    | 156.6        | 32.4      | —            | 353.4     | 356.3        |
| 369  | 18.0      | 6.0          | 5059.1         | 603.0        | 46.0      | 27.3         | 296.9     | 11.6         | 1413.1    | 157.0        | 32.6      | —            | 354.2     | 357.1        |
| 370  | 18.1      | 6.0          | 5070.3         | 604.4        | 46.1      | 27.4         | 297.9     | 11.6         | 1416.3    | 157.3        | 32.7      | —            | 355.1     | 358.0        |
| 371  | 18.1      | 6.1          | 5081.5         | 605.7        | 46.2      | 27.5         | 298.9     | 11.6         | 1419.6    | 157.7        | 32.9      | —            | 355.9     | 358.8        |
| 372  | 18.2      | 6.1          | 5092.8         | 607.0        | 46.3      | 27.5         | 300.0     | 11.7         | 1422.8    | 158.0        | 33.0      | —            | 356.7     | 359.6        |
| 373  | 18.2      | 6.1          | 5104.0         | 608.4        | 46.5      | 27.6         | 301.0     | 11.7         | 1426.0    | 158.4        | 33.2      | —            | 357.5     | 360.4        |
| 374  | 18.3      | 6.1          | 5115.2         | 609.7        | 46.6      | 27.6         | 302.0     | 11.8         | 1429.3    | 158.7        | 33.4      | —            | 358.3     | 361.2        |
| 375  | 18.3      | 6.1          | 5126.4         | 611.0        | 46.7      | 27.7         | 303.1     | 11.8         | 1432.5    | 159.1        | 33.5      | —            | 359.1     | 362.1        |
| 376  | 18.4      | 6.1          | 5137.6         | 612.4        | 46.8      | 27.8         | 304.1     | 11.8         | 1435.7    | 159.5        | 33.7      | —            | 359.9     | 362.9        |



| CALCULATED TOTAL RECOVERABLE METALS EFFLUENT LIMITATIONS FOR FRESHWATER DISCHARGES |           |              |                |              |           |              |           |              |           |              |           |              |           |              |
|--|-----------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| Hardness value   | Cadmium   |              | Chromium (III) |              | Copper    |              | Lead      |              | Nickel    |              | Silver    |              | Zinc      |              |
|  | Max Daily | Ave. Monthly | Max Daily      | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly | Max Daily | Ave. Monthly |
| 377  | 18.5      | 6.1          | 5148.7         | 613.7        | 46.9      | 27.8         | 305.1     | 11.9         | 1439.0    | 159.8        | 33.8      | —            | 360.7     | 363.7        |
| 378  | 18.5      | 6.2          | 5159.9         | 615.0        | 47.0      | 27.9         | 306.1     | 11.9         | 1442.2    | 160.2        | 34.0      | —            | 361.5     | 364.5        |
| 379  | 18.6      | 6.2          | 5171.1         | 616.4        | 47.2      | 28.0         | 307.2     | 12.0         | 1445.4    | 160.5        | 34.1      | —            | 362.4     | 365.3        |
| 380  | 18.6      | 6.2          | 5182.3         | 617.7        | 47.3      | 28.0         | 308.2     | 12.0         | 1448.6    | 160.9        | 34.3      | —            | 363.2     | 366.1        |
| 381  | 18.7      | 6.2          | 5193.4         | 619.0        | 47.4      | 28.1         | 309.2     | 12.1         | 1451.9    | 161.3        | 34.4      | —            | 364.0     | 367.0        |
| 382  | 18.7      | 6.2          | 5204.6         | 620.4        | 47.5      | 28.1         | 310.3     | 12.1         | 1455.1    | 161.6        | 34.6      | —            | 364.8     | 367.8        |
| 383  | 18.8      | 6.2          | 5215.8         | 621.7        | 47.6      | 28.2         | 311.3     | 12.1         | 1458.3    | 162.0        | 34.7      | —            | 365.6     | 368.6        |
| 384  | 18.8      | 6.2          | 5226.9         | 623.0        | 47.7      | 28.3         | 312.3     | 12.2         | 1461.5    | 162.3        | 34.9      | —            | 366.4     | 369.4        |
| 385  | 18.9      | 6.2          | 5238.1         | 624.3        | 47.9      | 28.3         | 313.4     | 12.2         | 1464.8    | 162.7        | 35.1      | —            | 367.2     | 370.2        |
| 386  | 19.0      | 6.3          | 5249.2         | 625.7        | 48.0      | 28.4         | 314.4     | 12.3         | 1468.0    | 163.0        | 35.2      | —            | 368.0     | 371.0        |
| 387  | 19.0      | 6.3          | 5260.3         | 627.0        | 48.1      | 28.5         | 315.5     | 12.3         | 1471.2    | 163.4        | 35.4      | —            | 368.8     | 371.8        |
| 388  | 19.1      | 6.3          | 5271.5         | 628.3        | 48.2      | 28.5         | 316.5     | 12.3         | 1474.4    | 163.8        | 35.5      | —            | 369.6     | 372.7        |
| 389  | 19.1      | 6.3          | 5282.6         | 629.7        | 48.3      | 28.6         | 317.5     | 12.4         | 1477.6    | 164.1        | 35.7      | —            | 370.4     | 373.5        |
| 390  | 19.2      | 6.3          | 5293.7         | 631.0        | 48.4      | 28.7         | 318.6     | 12.4         | 1480.8    | 164.5        | 35.8      | —            | 371.2     | 374.3        |
| 391  | 19.2      | 6.3          | 5304.8         | 632.3        | 48.6      | 28.7         | 319.6     | 12.5         | 1484.0    | 164.8        | 36.0      | —            | 372.1     | 375.1        |
| 392  | 19.3      | 6.3          | 5315.9         | 633.6        | 48.7      | 28.8         | 320.7     | 12.5         | 1487.3    | 165.2        | 36.2      | —            | 372.9     | 375.9        |
| 393  | 19.3      | 6.3          | 5327.0         | 635.0        | 48.8      | 28.8         | 321.7     | 12.5         | 1490.5    | 165.5        | 36.3      | —            | 373.7     | 376.7        |
| 394  | 19.4      | 6.4          | 5338.1         | 636.3        | 48.9      | 28.9         | 322.7     | 12.6         | 1493.7    | 165.9        | 36.5      | —            | 374.5     | 377.5        |
| 395  | 19.5      | 6.4          | 5349.2         | 637.6        | 49.0      | 29.0         | 323.8     | 12.6         | 1496.9    | 166.3        | 36.6      | —            | 375.3     | 378.3        |
| 396  | 19.5      | 6.4          | 5360.3         | 638.9        | 49.1      | 29.0         | 324.8     | 12.7         | 1500.1    | 166.6        | 36.8      | —            | 376.1     | 379.2        |
| 397  | 19.6      | 6.4          | 5371.4         | 640.2        | 49.3      | 29.1         | 325.9     | 12.7         | 1503.3    | 167.0        | 37.0      | —            | 376.9     | 380.0        |
| 398  | 19.6      | 6.4          | 5382.5         | 641.6        | 49.4      | 29.2         | 326.9     | 12.7         | 1506.5    | 167.3        | 37.1      | —            | 377.7     | 380.8        |
| 399  | 19.7      | 6.4          | 5393.6         | 642.9        | 49.5      | 29.2         | 328.0     | 12.8         | 1509.7    | 167.7        | 37.3      | —            | 378.5     | 381.6        |
| 400  | 19.7      | 6.4          | 5404.6         | 644.2        | 49.6      | 29.3         | 329.0     | 12.8         | 1512.9    | 168.0        | 37.4      | —            | 379.3     | 382.4        |

## **ATTACHMENT D – STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [40 CFR §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement [40 CFR §122.41(a)(1)].

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [40 CFR §122.41(c)].

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR §122.41(d)].

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [40 CFR §122.41(e)].

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 CFR §122.41(g)].

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [40 CFR §122.5(c)].

## **F. Inspection and Entry**

The Discharger shall allow the Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383(c)]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [40 CFR §122.41(m)(2)].

3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice) [40 CFR Section 122.41(m)(3)(ii)].

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR §122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was

caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR Section 122.41(n)(2)].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR §122.41(n)(3)]:
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
  - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) [40 CFR Section 122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR §122.41(n)(4)].

## II. STANDARD PROVISIONS – PERMIT ACTION

### A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [40 CFR §122.41(f)].

### B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [40 CFR §122.41(b)].

### C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [40 CFR §122.41(l)(3)] [40 CFR §122.61].

### **III. STANDARD PROVISIONS – MONITORING**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR §122.41(j)(1)].
- B.** Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [40 CFR §122.41(j)(4)] [40 CFR §122.44(i)(1)(iv)].

### **IV. STANDARD PROVISIONS – RECORDS**

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR §122.41(j)(2)].

**B. Records of monitoring information shall include:**

- 1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];
- 2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
- 3. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
- 4. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
- 5. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
- 6. The results of such analyses [40 CFR §122.41(j)(3)(vi)].

**C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:**

- 1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and

2. Permit applications and attachments, permits and effluent data [*40 CFR §122.7(b)(2)*].

## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, SWRCB, or USEPA within a reasonable time, any information which the Regional Water Board, SWRCB, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, SWRCB, or USEPA copies of records required to be kept by this Order [*40 CFR §122.41(h)*] [*CWC 13267*].

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below [*40 CFR Section 122.41(k)*].
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [*40 CFR Section 122.22(a)(3)*].
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above [*40 CFR Section 122.22(b)(1)*];
  - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [*40 CFR Section 122.22(b)(2)*]; and
  - c. The written authorization is submitted to the Regional Water Board and State Water Board [*40 CFR Section 122.22(b)(3)*].

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board, State Water Board or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR Section 122.22(c)].
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations" [40 CFR Section 122.22(d)].

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or SWRCB for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [40 CFR §122.41(l)(4)(iii)].

### **D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [40 CFR §122.41(l)(5)].



## **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR §122.41(l)(6)(iii)].

## **F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR §122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [40 CFR §122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §122.41(l)(1)(ii)].
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during

the permit application process or not reported pursuant to an approved land application plan [40 CFR §122.41(l)(1)(iii)].

#### **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or SWRCB of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [40 CFR §122.41(l)(2)].

#### **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above [40 CFR Section 122.41(l)(7)].

#### **I. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, SWRCB, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR §122.41(l)(8)].

### **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387.

### **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

#### **A. Publicly-Owned Treatment Works (POTWs)**

All POTWs shall provide adequate notice to the Regional Water Board of the following [40 CFR Section 122.42(b)]:

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the CWA if it were directly discharging those pollutants [40 CFR Section 122.42(b)(1)]; and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [40 CFR Section 122.42(b)(2)].

3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [*40 CFR Section 122.42(b)(3)*].

## Attachment E – Monitoring and Reporting Program

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## **Attachment E – Monitoring and Reporting Program (MRP)**

The Code of Federal Regulations (CFR) at 40 CFR §122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement the federal and California regulations.

### **I. GENERAL MONITORING PROVISIONS**

#### **A. General Monitoring Provision**

1. All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).
2. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR 136 (revised as of April 11, 2007) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (EPA), unless otherwise specified in this MRP. In addition, the Regional Water Board and/or EPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136.
3. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports, or EPA or at laboratories approved by the Regional Water Board's Executive Officer.
4. Whenever the Discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.
5. In conformance with federal regulations 40 CFR 122.45(c), analyses to determine compliance with the effluent limitations for metals shall be conducted using the total recoverable method. For Chromium (VI), the dissolved method in conformance with 40 CFR 136 may be used to measure compliance with the Chromium (VI) limitation.

6. For effluent wastewater monitoring:

- a. The Discharger shall require its testing laboratory to calibrate the analytical system down to the minimum level (ML)<sup>1</sup> specified in Attachment "H" for priority pollutants with effluent limitations in this Order, unless an alternative reporting level is approved by the Regional Water Board's Executive Officer. When there is more than one ML value for a given substance, the Discharger shall use the ML values, and their associated analytical methods, listed in Attachment "H" that are below the calculated effluent limitation. The Discharger may select any one of those cited analytical methods for compliance determination. If no ML value is below the effluent limitation, then the lowest ML value and its associated analytical method, listed in Attachment "H" shall be used. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.
- b. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
  - (1) Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
  - (2) Sample results less than the reported ML, but greater than or equal to the laboratory's current Method Detection Limit (MDL)<sup>2</sup>, shall be reported as "Detected, but Not Quantified," or "DNQ." The estimated chemical concentration of the sample shall also be reported.
  - (3) Sample results not detected above the laboratory's MDL shall be reported as "not detected" or "ND."
- c. The Discharger shall submit to the Regional Water Board reports necessary to determine compliance with effluent limitations in this Order and shall follow the chemical nomenclature and sequential order of priority pollutant constituents shown in Attachment "G" – Priority Pollutant Lists. The Discharger shall report with each sample result:
  - (1) The reporting level achieved by the testing laboratory; and

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<sup>1</sup> Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

<sup>2</sup> MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analytical concentration is greater than zero, as defined in 40 CFR 136, Appendix B, revised as of April 11, 2007.

- (2) The laboratory's current MDL, as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007).
- d. For receiving water monitoring and for those priority pollutants without effluent limitations, the Discharger shall require its testing laboratory to quantify constituent concentrations to the lowest achievable MDL as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007). In situations where the most stringent applicable receiving water objective (freshwater or human health (consumption of organisms only), as specified for that pollutant in 40 CFR 131.38<sup>3</sup> is below the minimum level value specified in Attachment "H" and the Discharger cannot achieve an MDL value for that pollutant below the ML value, the Discharger shall submit justification why a lower MDL value cannot be achieved. Justification shall be submitted together with monthly monitoring reports.
7. For non-priority pollutants monitoring, all analytical data shall be reported with method detection limits, as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007).
8. The Discharger shall have, and implement an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by the Regional Water Board or EPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study.
9. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, the actions undertaken or proposed that will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when compliance with the time schedule has been achieved.
10. The Discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years (this retention period supercedes the retention period specified in Section IV.A. of Attachment D) from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Water Board at any time. Records of monitoring information shall include:
- a. The information listed in Attachment D- IV Standard Provisions – Records, subparagraph B. of this Order;
  - b. The laboratory which performed the analyses;
  - c. The date(s) analyses were performed;

- d. The individual(s) who performed the analyses;
  - e. The modification(s) to analytical techniques or methods used;
  - f. All sampling and analytical results, including
    - (1) Units of measurement used;
    - (2) Minimum reporting level for the analysis (minimum level);
    - (3) Results less than the reporting level but above the method detection limit (MDL);
    - (4) Data qualifiers and a description of the qualifiers;
    - (5) Quality control test results (and a written copy of the laboratory quality assurance plan);
    - (6) Dilution factors, if used; and
    - (7) Sample matrix type.
  - g. All monitoring equipment calibration and maintenance records;
  - h. All original strip charts from continuous monitoring devices;
  - i. All data used to complete the application for this Order; and,
  - j. Copies of all reports required by this Order.
  - k. Electronic data and information generated by the Supervisory Control And Data Acquisition (SCADA) System.
11. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.
12. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the Discharger shall obtain a representative grab sample each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the Discharger shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.
13. Monitoring and reporting shall be in accordance with the following:
- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. The monitoring and reporting of influent, effluent, and sludge shall be done more frequently as necessary to maintain compliance with this Order and or as specified in this order.
  - c. Whenever the Discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.
  - d. A "grab" sample is defined as any individual sample collected in less than 15 minutes.



- e. A composite sample is defined as a combination of no fewer than eight individual grab samples obtained over the specified sampling period. The volume of each individual grab sample shall be proportional to the discharge flow rate at the time of sampling. The compositing period shall equal the specific sampling period, or 24 hours, if no period is specified.
- f. Daily samples shall be collected on each day of the week.
- g. Monthly samples shall be collected on any representative day of each month.
- h. Quarterly samples: A representative sample shall be taken on any representative day of January, April, July, and October and test results shall be reported in either micrograms/liter (ug/L) or milligrams/liter (mg/L), as appropriate, by the last day of the month following the month that the sample was taken.
- i. Semi-annual samples shall be collected in January and July.
- j. Annual samples shall be collected in accordance with the following schedule:

**Table 1. Annual Sampling Schedule**

| Year | Annual Samples |
|------|----------------|
| 2007 | October        |
| 2008 | January        |
| 2009 | April          |
| 2010 | July           |
| 2011 | October        |
| 2012 | January        |

14. The discharger shall multiply each measured or estimated congener concentration by its respective toxic equivalency factor (TEF) as shown below and report the sum of these values. The discharger shall use the U.S. EPA approved test method 1613 for dioxins and furans. Dioxin testing is required for new dischargers only.

**Table 2. Toxic Equivalency Factors for 2,3,7, 8-TCDD Equivalents**

| Congener               | TEF    |
|------------------------|--------|
| 2,3,7,8-TetraCDD       | 1      |
| 1,2,3,7,8-PentaCDD     | 1.0    |
| 1,2,3,4,7,8-HexaCDD    | 0.1    |
| 1,2,3,6,7,8-HexaCDD    | 0.1    |
| 1,2,3,7,8,9-HexaCDD    | 0.1    |
| 1,2,3,4,6,7,8-HeptaCDD | 0.01   |
| OctaCDD                | 0.0001 |
| 2,3,7,8-TetraCDF       | 0.1    |
| 1,2,3,7,8-PentaCDF     | 0.05   |
| 2,3,4,7,8-PentaCDF     | 0.5    |
| 1,2,3,4,7,8-HexaCDF    | 0.1    |
| 1,2,3,6,7,8-HexaCDF    | 0.1    |
| 1,2,3,7,8,9-HexaCDF    | 0.1    |
| 2,3,4,6,7,8-HexaCDF    | 0.1    |
| 1,2,3,4,6,7,8-HeptaCDF | 0.01   |
| 1,2,3,4,7,8,9-HeptaCDF | 0.01   |
| OctaCDF                | 0.0001 |

## B. Laboratory Certification

Laboratories analyzing monitoring samples shall be certified by the Department of Public Health, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

## II. MONITORING LOCATIONS

The Discharger shall establish monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order. The sample station shall be located where representative samples can be obtained before the extracted groundwater is treated and discharged. The volume of daily extracted groundwater shall be recorded daily on a permanent log.

## III. INFLUENT MONITORING REQUIREMENTS

A grab<sup>4</sup> sample of the influent to the treatment system shall be monitored on a monthly basis for compounds using EPA method 8260B and for total petroleum hydrocarbons.

## IV. EFFLUENT MONITORING REQUIREMENTS

A. The following shall constitute the effluent monitoring program:

**Table 3. Effluent Monitoring Program**

| Parameter <sup>5</sup>                    | Unit | Sample Type | Minimum Sampling Frequency               | Required Analytical Test Method and Minimum Level, units, respectively |
|---|------|-------------|--|--|
| Flow                                      | mgd  | -----       | Daily for one week and weekly thereafter | See Section I.A.3. above, of this MRP                                  |
| Total Petroleum Hydrocarbons <sup>6</sup> | µg/L | Grab        | Weekly                                   | EPA METHOD 8015 Modified   |
| Benzene                                   | µg/L | Grab        | Weekly                                   | EPA Method 8260  |
| Toluene                                   | µg/L | Grab        | Weekly                                   | "  |

<sup>4</sup> A "grab" sample is defined as any individual sample collected in less than 15 minutes.

<sup>5</sup> For testing organic volatile compounds use EPA Method 8260B and report entire suite of detected constituents.

<sup>6</sup> Total Petroleum Hydrocarbons by method 8015 modified for gasoline and/or diesel, if present.

**Table 3. Effluent Monitoring Program**

| <b>Parameter<sup>5</sup></b>        | <b>Unit</b> | <b>Sample Type</b> | <b>Minimum Sampling Frequency</b> | <b>Required Analytical Test Method and Minimum Level, units, respectively</b> |
|-------------------------------------|-------------|--------------------|-----------------------------------|---|
| Xylene (total)                      | µg/L        | Grab               | Weekly                            | EPA Method 8260"  |
| 1,2,3-Trichloropropane <sup>7</sup> | µg/L        | Grab               | Weekly                            | "   |
| Ethylbenzene                        | µg/L        | Grab               | Weekly                            | EPA Method 8260   |
| Carbon Tetrachloride                | µg/L        | Grab               | Weekly                            | "   |
| Chloroform                          | µg/L        | Grab               | Weekly                            | "   |
| Dichlorobromomethane                | µg/L        | Grab               | Weekly                            | "   |
| Methyl Ethyl Ketone                 | µg/L        | Grab               | Weekly                            | "   |
| Methyl Isobutyl Ketone              | µg/L        | Grab               | Weekly                            | "   |
| Methyl Tertiary Butyl Ether (MTBE)  | µg/L        | Grab               | Weekly                            | "   |
| Naphthalene                         | µg/L        | Grab               | Weekly                            | "   |
| Tetrachloroethylene (PCE)           | µg/L        | Grab               | Weekly                            | "   |
| Trichloroethylene (TCE)             | µg/L        | Grab               | Weekly                            | "   |
| 1,1-Dichloroethane (1,1-DCA)        | µg/L        | Grab               | Weekly                            | "   |
| 1,2-Dichloroethane (1,2-DCA)        | µg/L        | Grab               | Weekly                            | "   |
| 1,1-Dichloroethylene (1,1-DCE)      | µg/L        | Grab               | Weekly                            | "   |
| 1,2-Dichloroethylene (cis)          | µg/L        | Grab               | Weekly                            | "   |
| 1,2-Dichloroethylene (trans)        | µg/L        | Grab               | Weekly                            | "   |
| 1,1,1-Trichloroethane (1,1,1-TCA)   | µg/L        | Grab               | Weekly                            | "   |
| 1,4-Dioxane                         | µg/L        | Grab               | Weekly                            | "   |
| Tert Butyl Alcohol (TBA)            | µg/L        | Grab               | Weekly                            | "   |
| Vinyl Chloride                      | µg/L        | Grab               | Weekly                            | "   |
| Acrolein                            | µg/L        | Grab               | Weekly                            | "   |
| Acrylonitrile                       | µg/L        | Grab               | Weekly                            | "   |
| Ethylene Dibromide (EDB)            | µg/L        | Grab               | Weekly                            | "   |
| Perchlorate                         | µg/L        | Grab               | Weekly                            | See Section I.A. 2, 3. above, of this MRP                                     |
| Total Phenols                       | mg/L        | Grab               | Weekly                            | See Section I.A. 2, 3. above, of this MRP                                     |

**Table 3. Effluent Monitoring Program**

| Parameter <sup>5</sup>                            | Unit       | Sample Type | Minimum Sampling Frequency                     | Required Analytical Test Method and Minimum Level, units, respectively                    |
|---|------------|-------------|--|---|
| Total Residual Chlorine <sup>8</sup>              | mg/L       | Grab        | Weekly for the first month, monthly thereafter | See Section I.A.2. & I.A.3. above, of this MRP  |
| Total Suspended Solids                            | mg/L       | "           | "  | "   |
| Oil and Grease                                    | mg/L       | "           | "  | "   |
| Total Inorganic Nitrogen (TIN)                    | mg/L       | "           | "  | "   |
| Total Phosphorous                                 | mg/L       | "           | "  | "   |
| Sulfide   | mg/L       | "           | "  | "   |
| Coliform Organisms <sup>9</sup>                   | MPN        | "           | "  | "   |
| Methylene Blue Activated Substances (MBAS)        | mg/L       | "           | "  | "   |
| Total DDT   | µg/L       | "           | See paragraph IV.B., below                     | Reporting Level shall have prior approval by Regional Board Executive Officer or designee |
| Chlordane   | µg/L       | "           | "  |   |
| Total PCBs  | µg/L       | "           | "  |   |
| Toxaphene   | µg/L       | "           | "  |   |
| Total Arsenic                                     | µg/L       | Grab        | See paragraph IV.B., below                     | See Section I.A.2. & I.A.3. above, of this MRP  |
| Total Recoverable Selenium                        | "          | "           | "  | "   |
| Total Recoverable Cadmium <sup>10</sup>           | "          | "           | "  | "   |
| Total Recoverable & Dissolved Copper <sup>9</sup> | "          | "           | "  | "   |
| Total Recoverable & Dissolved Lead <sup>9</sup>   | "          | "           | "  | "   |
| Total Recoverable Nickel <sup>9</sup>             | "          | "           | "  | "   |
| Total Recoverable & Dissolved Zinc <sup>9</sup>   | µg/L       | "           | "  | "   |
| pH  | Std. Units | "           | "  | "   |
| Temperature                                       | °F         | "           | "  | "   |

<sup>8</sup> If chlorine is used for treatment or disinfection of wastes.

<sup>9</sup> Only for groundwater dewatering projects in the vicinity of active sewer lines.

<sup>10</sup> This constituent shall be monitored for four sampling events. If all four sample test results pursuant to IV.B., whichever is applicable, result in non-detection, no further monitoring for this constituent is required.

**Table 3. Effluent Monitoring Program**

| <b>Parameter<sup>5</sup></b>  | <b>Unit</b>                | <b>Sample Type</b> | <b>Minimum Sampling Frequency</b>                          | <b>Required Analytical Test Method and Minimum Level, units, respectively</b> |
|---|----------------------------|--------------------|--|---|
| Dissolved Oxygen  | mg/L                       | "                  | "  | "   |
| Hardness  | mg/L                       | "                  | "  | "   |
| Total Alkalinity  | mg<br>CaCO <sub>3</sub> /L | "                  | "  | "   |
| Electrical Conductance  | µmhos/cm                   | Grab               | See paragraph IV.B., below                                 | See Section I.A.2. & I.A.3. above, of this MRP                                |
| 2,3,7,8-TetraCDD  | µg/L                       | Grab               | Semi-annual<br>(See I.A.13.i. & I.A.14.)                   | See Section I.A.2. & I.A.3. above, of this MRP                                |
| 1,2,3,7,8-PentaCDD  | "                          | "                  | "  | "   |
| 1,2,3,4,7,8-HexaCDD   | "                          | "                  | "  | "   |
| 1,2,3,6,7,8-HexaCDD   | "                          | "                  | "  | "   |
| 1,2,3,7,8,9-HexaCDD   | "                          | "                  | "  | "   |
| 1,2,3,4,6,7,8-HeptaCDD  | "                          | "                  | "  | "   |
| OctaCDD   | "                          | "                  | "  | "   |
| 2,3,7,8-TetraCDF  | "                          | "                  | "  | "   |
| 1,2,3,7,8-PentaCDF  | "                          | "                  | "  | "   |
| 2,3,4,7,8-PentaCDF  | "                          | "                  | "  | "   |
| 1,2,3,4,7,8-HexaCDF   | "                          | "                  | "  | "   |
| 1,2,3,6,7,8-HexaCDF   | "                          | "                  | "  | "   |
| 1,2,3,7,8,9-HexaCDF   | "                          | "                  | "  | "   |
| 2,3,4,6,7,8-HexaCDF   | "                          | "                  | "  | "   |
| 1,2,3,4,6,7,8-HeptaCDF  | "                          | "                  | "  | "   |
| 1,2,3,4,7,8,9-HeptaCDF  | "                          | "                  | "  | "   |
| OctaCDF   | µg/L                       | "                  | Semi-annual<br>(See I.A.9.i. & I.A.10.)                    | "   |
| Total Dissolved Solids  | mg/L                       | Grab               | Annually   | "   |
| Priority Pollutant (see Paragraph IV.3., below and Attachment "G" ) | µg/L                       | Grab               | Once during the first year of remediation and upon renewal | See Section I.A.2. & I.A.3. above, of this MRP                                |
| Toxicity Testing (see Section V., below)                            | Pass/<br>Fail              | Grab               | At the initiation of the project and annually thereafter   | See Section I.A.2. & I.A.3. above, of this MRP                                |

**B. Minimum Frequency of Sampling & Analysis:**

- a. For projects that result in discharges of wastewater of 1 million gallons per day (mgd) or more, daily grab samples for four consecutive days shall be taken and analyzed individually for the constituent required to be monitored. Subsequent samples shall be taken and analyzed once quarterly, unless directed otherwise by the Regional Board Executive Officer. If the discharge does not last for more than a day, one composite sample taken for the duration of the discharge shall be analyzed;
- b. For all other projects that result in discharges of wastewater of less than 1 mgd, weekly sampling and analyses shall be conducted for the first month. Subsequent sampling and analyses shall be conducted once quarterly, unless directed otherwise by the Regional Board Executive Officer.

**C. Total nitrogen and total recoverable selenium offset monitoring and reporting:**

- a. Dischargers responsible for providing a nitrogen and/or selenium offset shall assure that sufficient monitoring of influent and effluent flow, total nitrogen including particulate organic nitrogen (specifically for San Joaquin Marsh wetlands ponds treatment system effluent discharges), and/or total selenium concentrations, as appropriate, from the facility(ies) providing the offset is conducted to demonstrate that the requisite offset(s) of the discharger's nitrogen and/or selenium load is achieved.
- b. Provide documentation necessary to demonstrate that implementation of the offset(s) results in requisite reduction of total nitrogen and selenium as applicable.
- c. If no offset occurs during the monitoring period, a letter to that effect shall be submitted in lieu of a monitoring report. The letter shall include a justification for the failure to provide the offset.

**V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS**

**A. Toxicity Monitoring Requirements**

1. The discharger shall conduct acute toxicity testing as specified in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA/821-R-02-012, October 2002). Using a control and 100% effluent, static renewal survival (pass/fail) tests for 96 hours shall be conducted using the two test species specified in the table below corresponding to the onsite groundwater salinity, for the first required annual test under this permit. Based on the results, the Discharger shall determine the most sensitive test species. For the required succeeding toxicity monitoring, the Discharger shall use the most sensitive species with prior approval from the Regional Board Executive Officer. The Discharger shall submit documentation supporting the Discharger's determination of the most sensitive test species. The effluent tests must be conducted concurrent with reference toxicant tests. The effluent and reference toxicant tests must meet all test

acceptability criteria as specified in the acute manual<sup>11</sup>. If the test acceptability criteria are not achieved, then the discharger must re-sample and re-test within 14 days. The test results must be reported according to the acute manual chapter on Report Preparation, and shall be attached to the monitoring reports. The use of alternative methods for measuring acute toxicity may be considered by the Executive Officer on a case-by-case basis.

**Table 4. Test Species**

| If the Effluent or Receiving Water Salinity is: | Test Species                               | Test                 |
|---|--|----------------------|
| Less than 1,000 mg/l salinity                   | Fathead minnow, <i>Pimphales promelas</i>  | Larval survival test |
|   | Water flea, <i>Ceriodaphnia dubia</i>      | Survival test        |
| Equal to or greater than 1,000 mg/l salinity    | Silverside, <i>Menedia beryllina</i>       | Survival Test        |
|   | Pacific mysid, <i>Holmesimysis costata</i> | Survival Test        |

- In the event that the required annual toxicity test fails, the Discharger shall stop any discharge of wastewater to waters of the U.S. and shall retest within 14 days of receiving the notice of failure and shall determine the cause of the failure. The Discharger shall stop any discharge of wastewater to waters of the U.S. until such time that the cause of toxicity is determined and appropriately addressed. Commencement of any discharge shall be with prior approval by the Executive Officer.

#### VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE.

#### VII. RECEIVING WATER MONITORING REQUIREMENTS – NOT APPLICABLE

#### VIII. REPORTING REQUIREMENTS

##### A. General Monitoring and Reporting Requirements

- The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
- All analytical data shall be reported with method detection limit<sup>12</sup> (MDLs) and with identification of either reporting level or limits of quantitation (LOQs).

<sup>11</sup> "Acute manual" refers to protocols described in "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" (EPA/821-R-02-012, October 2002).

<sup>12</sup> The standardized test procedure to be used to determine the method detection limit (MDL) is given at Appendix B, 'Definition and Procedure for the Determination of the Method Detection Limit' of 40 CFR 136.

3. Laboratory data for effluent samples must quantify each constituent down to the down to ML specified in Attachment "H" for priority pollutants. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.
4. Discharge monitoring data shall be submitted in a format acceptable by the Regional Water Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this Order shall be reported to the Regional Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order.
5. The Discharger shall submit to the Regional Water Board reports necessary to determine compliance with effluent limitations in this Order and shall follow the chemical nomenclature and sequential order of priority pollutant constituents shown in Attachment "G" – Priority Pollutant Lists. The Discharger shall report with each sample result:
  - a. The reporting level achieved by the testing laboratory; and
  - b. The laboratory's current MDL, as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007).
6. For those priority pollutants without effluent limitations, the Discharger shall require its testing laboratory to quantify constituent concentrations to the lowest achievable MDL as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007). In situations where the most stringent applicable receiving water objective (freshwater or human health (consumption of organisms only), as specified for that pollutant in 40 CFR 131.38<sup>13</sup> is below the minimum level value specified in Attachment "H" and the Discharger cannot achieve an MDL value for that pollutant below the ML value, the Discharger shall submit justification why a lower MDL value cannot be achieved. Justification shall be submitted together with monthly monitoring reports.
7. For non-priority pollutants monitoring, all analytical data shall be reported with identification of method detection limits, as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007).
8. The State or Regional Water Board may notify the Discharger to discontinue submittal of hard copies of reports. When such notification is given, the Discharger shall stop submitting hard copies of required monitoring reports.



## **B. Reporting Requirements:**

1. All monitoring reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR 122.22 and shall be submitted under penalty of perjury.
2. All reports shall be arranged in a tabular format to clearly show compliance or noncompliance with each discharge limitation.
3. One week before groundwater extraction, treatment, and discharge is commenced, the Discharger shall notify the Regional Board or its designated compliance officer by email and/or orally by telephone.
4. If no discharge occurs during the previous monitoring period, a letter to that effect shall be submitted in lieu of a monitoring report.
5. The Discharger shall notify the Regional Board in writing when groundwater treatment and discharge is stopped for more than a week. The report shall include a discussion as to why groundwater remediation is stopped and when treatment will commence.
6. Noncompliance Reporting
  - a. The discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided to the Executive Officer (951-782-4130) and the Office of Emergency Services (1-800-852-7550) orally within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
  - b. Any violation of a maximum daily discharge limitation for any of the pollutants listed in this Order shall be included as information that must be reported within 24 hours.
  - c. The Regional Board may waive the above required written report on a case-by-case basis.
7. Except for data determined to be confidential under Section 308 of the Clean Water Act (CWA), all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the Regional Water Quality Control Board and the Regional Administrator of EPA. As required by the CWA, effluent data shall not be considered confidential.

8. Monitoring reports shall be submitted by the 30th day of each month following the monitoring period and shall include:
  - a. The results of all chemical analyses for the previous month, and annual samples whenever applicable,
  - b. The daily flow data,
  - c. A summary of the month's activities including a report detailing compliance or noncompliance with the task for the specific schedule date, and
  - d. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed which will bring the discharger into full compliance with requirements at the earliest time, and an estimate of the date when the discharger will be in compliance. The discharger shall notify the Regional Board by letter when compliance with the time schedule has been achieved.
9. For Dischargers discharging at a volume equal to or greater than 150,000 gallons per day, the Discharger shall submit semi-annual reports that tabulate all measured flows and measured parameters within the most recent six month period. Where discharges associated with these projects last less than 6 months, a report covering the period of discharges shall be submitted. Copies of these monitoring reports shall be submitted to the Regional Board and to the Water Quality Director of the Orange County Water District at P.O. Box 8300, Fountain Valley, CA 92728-8300.

### **C. Self Monitoring Reports (SMRs)**

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs in accordance with the requirements described in subsection B.5 below. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. Additionally, the Discharger shall report in the SMR the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C. of this Order. The Discharger shall submit monthly, quarterly, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table 5. Monitoring Periods and Reporting Schedule**

| <b>Sampling Frequency</b> | <b>Monitoring Period Begins On...</b>  | <b>Monitoring Period</b>  | <b>SMR Due Date</b>   |
|---------------------------|--|---|---|
| Continuous                | Day after permit effective date  | All   | 30 <sup>th</sup> day of the month following the sampling month. |
| Hourly                    | Day after permit effective date  | Hourly  | 30 <sup>th</sup> day of the month following the sampling month. |
| Daily                     | Day after permit effective date  | Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of sampling.   | 30 <sup>th</sup> day of the month following the sampling month. |
| Weekly                    | Sunday following permit effective date or on permit effective date if on a Sunday  | Sunday through Saturday   | 30 <sup>th</sup> day of the month following the sampling month. |
| Monthly                   | First day of calendar month following permit effective date or on permit effective date if that date is first day of the month | 1 <sup>st</sup> day of calendar month through last day of calendar month  | 30 <sup>th</sup> day of the month following the sampling month. |
| Quarterly                 | Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date                                    | January 1 through March 31<br>April 1 through June 30<br>July 1 through September 30<br>October 1 through December 31 | April 30<br>July 30<br>October 30<br>January 30                 |
| Semiannually              | Closest of January 1 or July 1 following (or on) permit effective date   | January 1 through June 30<br>July 1 through December 31   | July 30<br>January 30   |
| Annually                  | See Table 1  | See Table 1   | 30 <sup>th</sup> day of the month following the sampling month. |
| Per Discharge Event       | Anytime during the discharge event or as soon as possible after aware of the event   | At a time when sampling can characterize the discharge event  | 30 <sup>th</sup> day of the month following the sampling month. |

**D. Other Reports – Not Applicable**

## ATTACHMENT F – FACT SHEET

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## **ATTACHMENT F – FACT SHEET**

This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this General Permit.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Some sections or subsections of this Order have therefore been identified as “not applicable” to this group of Dischargers. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to the Dischargers authorized by the General Permit.

### **I. PERMIT INFORMATION**

Order No. R8-2007-0008, NPDES No. CAG918001 is a general NPDES permit adopted by the Regional Water Board on February 2, 2007, for discharges to surface waters of extracted and treated groundwater resulting from the cleanup of groundwater polluted by petroleum hydrocarbons and/or solvents at service stations and similar sites throughout the Santa Ana Region. This Order facilitated the processing of permit applications and the early implementation of groundwater cleanup projects within the Santa Ana Region. A number of authorizations to discharge under this Order have been issued to Dischargers within the San Diego Creek/Newport Bay Watershed.

Order No. R8-2004-0021, NPDES No. CAG998001 is a general NPDES permit adopted by the Regional Water Board on December 20, 2004, prescribing general waste discharge requirements for discharges to surface waters within the San Diego Creek/Newport Bay watershed. The discharges regulated under this Order include those resulting from hydrostatic testing of vessels, pipelines, and tanks, from the maintenance of potable water supply pipelines, tanks, and reservoirs, from fire hydrant testing or flushing, non-contact cooling water, air conditioning condensate, including those associated with well installation, development, test pumping and purging, aquifer testing wastes, construction dewatering and wastes from subterranean seepage and the like. Order No. R8-2004-0021 also specifies waste discharge requirements for short-term (i.e., one year or less) groundwater-related discharges within the San Diego Creek/Newport Bay watershed to address the presence in the groundwater of nitrates and selenium, and potentially other pollutants of TMDL concern.

Order No. R8-2007-0041 consolidates the requirements of Order No. R8-2007-0008, NPDES No. CAG918001, and Order No. R8-2004-0021, NPDES No. CAG998001, pertaining to groundwater-related discharges in Newport Bay and its watershed. Specifically, the proposed Order includes requirements to regulate groundwater-related discharges that may contain selenium, nutrients, volatile organic compounds, solvents or metals. The intent is to expedite the processing of applications for waste discharge requirements for projects where authorization under both Orders is currently necessary to regulate proposed groundwater-related discharges from a specific site within the San Diego Creek/Newport Bay watershed. The general NPDES permit approach has allowed the Regional Water Board to better utilize limited staff resources. Currently, some Dischargers are authorized under both Order No. R8-2004-0021 and Order No. R8-2007-0008. These

Dischargers are required to obtain authorization under the consolidated Order No. R8-2007-0041.

One Discharger (Nexus Construction Services) received temporary authorization to discharge dewatering wastes under Order No. R8-2004-0021, even though the discharges were not expected to be short-term, i.e., the discharges were expected to last more than one year. This temporary authorization was granted pending adoption of a new Order to regulate long-term groundwater-related discharges. Order No. R8-2007-0041 regulates all new groundwater-related discharges, including long-term dewatering discharges. Nexus Construction Services, which received temporary authorization to discharge under Order No. R8-2004-0021 pending adoption of an appropriate Order, is required to obtain authorization under Order No. R8-2007-0041.

Other short-term groundwater related Dischargers now regulated under Order No. R8-2004-0021 are not required to obtain coverage under Order No. R8-2007-0041. These discharges are expected to be complete prior to the expiration of Order No. R8-2004-0021 in December 2009. Order No. R8-2004-0021 is not expected to be renewed.

In some cases, discharges resulting from groundwater dewatering and/or cleanup operations may be proposed to surface waters that are impaired due to one or more pollutants not regulated by this Order. Where such pollutants are present in proposed discharges but no appropriate permit has yet been issued, temporary authorization to conduct the discharge under the terms and conditions of this Order may be granted by the Executive Officer, provided that (1) the Discharger demonstrates that temporary authorization for wastewater discharges is necessary to allow ongoing cleanup in order to prevent the migration and spread of the pollutants of concern; (2) the Discharger demonstrates that all reasonable efforts to avoid, reduce or eliminate the discharge of impairing constituents to surface waters have been implemented; (3) the Discharger demonstrates that the discharge will not contribute to the impairment of the receiving waters; and, (4) the discharge will be authorized under an appropriate individual or general permit when developed and approved by the Regional Water Board.

## II. NOTIFICATION REQUIREMENTS – GENERAL PERMIT APPLICATION

This Order requires each existing Dischargers regulated under Order No. R8-2007-0008 and/or Order No. R8-2004-0021 who requires ongoing regulatory coverage<sup>1</sup> to submit an updated Notice of Intent form to be covered under this permit.

This Order requires each new Discharger<sup>2</sup> to submit to the Executive Officer an application for the proposed discharge. Submission of the application will constitute a "Notice of Intent" to be covered under this Order. The application for the proposed discharge will require, at the minimum, the following information:

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<sup>1</sup> For Dischargers covered under only Order No. R8-2004-0021, the NOI must be filed only if the expected duration of the discharge is more than one year from the initiation of the discharge.

<sup>2</sup> "New Discharger" refers to those proposing to discharge wastewater under Order No. R8-2007-0041 and not currently covered under Order No. R8-2007-0008 and/or Order No. R8-2004-0021.

1. Notice of Intent to be covered under this general permit (see Attachment A of this Order).
2. A report that shall include the following:
  - a. Chemical analysis of the untreated groundwater. A representative groundwater sample shall be analyzed for organic pollutants using EPA method 8260B or equivalent. The characterization of the groundwater shall include total arsenic, total recoverable cadmium, total recoverable chromium VI, total recoverable copper, total recoverable lead, total recoverable mercury, total recoverable nickel, total recoverable selenium, total recoverable zinc, organochlorine compounds (Total Chlordane, Total DDT, Toxaphene, and PCBs), dissolved oxygen (DO), sulfate, chloride, electrical conductivity, total dissolved solids, total suspended solids, total nitrogen, total inorganic nitrogen, hardness, and priority pollutants including 1,4-dioxane and perchlorate. The selenium analysis used shall assure analytical detection levels sufficient to assess compliance with the effluent limitations of this Order. Test results shall be reported with Minimum levels (ML) and method detection limit (MDL); laboratory analytical limits shall be sufficient to detect these constituents at the concentrations listed in Tables 1, 2, 3, 4, and Attachment H.
  - b. The name of the proposed receiving water body, including the location (Latitude and Longitude) of the discharge point (s);
  - c. The estimated average and maximum daily flow rates, the start date of discharge (if a new discharge), and the duration of the discharge, and the estimated total volume of the discharge;
  - d. A map showing the path from the point of initial discharge to the ultimate location of discharge;
  - e. A list of known or suspected leaking underground tanks and other facilities or operations which have, or may have impacted the quality of the underlying groundwater within the expected radius of influence of the project;
  - f. A discussion of the proposed dewatering and/or cleanup project (if appropriate), including a review of the extraction system design and the status of definition of free product and dissolved product plumes for sites contaminated with petroleum hydrocarbon or solvents only (as appropriate);
  - g. A description of the proposed treatment system and a certification report on the adequacy of each component of the proposed treatment system along with the associated operation. This certification report shall contain a requirement-by-requirement analysis, based on accepted engineering practice, of how the process(es) and physical design(s) of the treatment system will ensure compliance with this Order. The design engineer shall affix his/her signature and engineering license number to this certification report. The report(s) shall also certify the following:
    - (1) All treatment facility startup and operation instruction manuals are adequate and available to operating personnel;



- (2) All treatment facility maintenance and testing schedules are included in the treatment facility operation and maintenance manual (O&M Manual), which shall be kept readily accessible to onsite operating personnel; and
    - (3) Influent and effluent sampling locations and ports are located in areas where samples representative of the waste stream to be monitored can be easily obtained.
  - h. A discussion of a plan for the prevention of run-on, interception and diversion of runoff, and prevention of infiltration and runoff from contaminated soils stored on-site, if the discharge is associated with a groundwater remediation project and soils containing petroleum projects or other pollutants will be maintained on-site; and
  - i. Any other information deemed necessary by the Executive Officer.
3. A site characterization study that defines the onsite contaminants (petroleum hydrocarbons, solvents, metals and/or salts) and their properties and the three-dimensional extent and concentration of contaminants in the subsurface, and includes a description of the geologic and hydrologic factors that control the migration of the contaminants.
  4. An evaluation of the selenium concentrations in proposed discharges and a determination of whether immediate compliance with the numeric effluent limitations specified in this Order for individual constituents is feasible. If immediate compliance is feasible, then the Discharger can, upon authorization under this Order, discharge in accordance with the numeric effluent limitations and with the remaining terms and conditions of this Order. If immediate compliance with the numeric selenium limitations is infeasible, then the Discharger must demonstrate that it is not reasonably feasible to reduce or eliminate the discharge to surface waters. If it is demonstrated that it is not reasonably feasible to reduce or eliminate the discharge, then the Discharger must either (a) submit for approval by the Executive Officer a proposed plan and schedule that assures that selenium discharges in excess of those allowed pursuant to the effluent limitations will be offset on at least a one-to-one basis, or as determined by the Regional Water Board's Executive Officer; or, (b) demonstrate that the Discharger is a participating member of the Nitrogen and Selenium Management Program (NSMP) Working Group (see IV. Applicable Plans, Policies and Regulations, E. and F., below).

Any proposed selenium offset must assure that there is no net loading of selenium to surface waters within the San Diego Creek/Newport Bay watershed. Dischargers who pursue a selenium offset are required to identify a plan and schedule for implementation of the offset prior to commencing any new discharge, and are required to implement that plan and schedule upon approval by the Executive Officer. This plan/schedule is to reflect the shortest practicable time necessary to provide the offset. In no case shall this schedule extend beyond December 20, 2009. It is recognized that the offset may not be completed within the time frame of the actual discharge; therefore, in filing a Notice of Intent to obtain authorization to discharge under this Order, these Dischargers are required to acknowledge explicitly that no notice of termination will be issued and

that compliance with this Order will continue to be required and enforced until such time as the offset is satisfactorily completed.

5. An evaluation of the nitrogen concentrations in proposed discharges and a determination of whether immediate compliance with the numeric effluent limitations specified in this Order for surface water discharges of nitrogen is feasible. A description of how a 50% reduction in nutrient discharges will be achieved if nitrogen is present in the discharges. If it is demonstrated that it is not reasonably feasible to achieve immediate compliance with the 50% reduction, then the Discharger is required to (1) identify a proposed plan and schedule whereby the 50% reduction will be achieved within the shortest practicable time, or (2) identify a proposed plan and schedule for implementation of a nitrogen offset. The nitrogen offset program must (a) assure the reduction of nitrogen loading to surface waters equivalent to the requisite 50% reduction, (b) assure the completion of the offset in the shortest practicable time, and (c) be implemented upon approval by the Executive Officer. It is recognized that the offset may not be completed within the time frame of the actual discharge; therefore, in filing a Notice of Intent to obtain authorization to discharge under this Order, these Dischargers are required to acknowledge explicitly that no notice of termination will be issued and that compliance with this Order will continue to be required and enforced until such time as the offset is satisfactorily completed.
6. The Discharger shall submit for approval by the Executive Officer of the Regional Water Board a fixed hardness value based on the 5th percentile of effluent hardness measurements or the average ambient receiving water hardness measurements for those sites polluted with metals (lead, cadmium, copper, chromium (III), nickel, silver, and zinc).

### **III. GROUNDWATER MANAGEMENT ZONE AND WASTEWATER DESCRIPTION**

The groundwater management zone in the San Diego Creek/Newport Bay Watershed consists of a deep regional aquifer overlain by a shallow perched aquifer. The deep aquifer, an important component of the water supply for Orange County, is recharged naturally through infiltration along the flanks of the Santa Ana Mountains, and artificially through actively managed spreading basins along the Santa Ana River. The shallow aquifer is poorly transmissive, restricted in extent, and found largely in the central portion of the watershed in the Tustin Plain. Historically, this aquifer recharged through local vertical infiltration. Surface runoff in the watershed ponded seasonally in the area known as the Swamp of the Frogs, where shallow groundwater seeped to the surface.

The quality and hydrology of the shallow groundwater has been altered by anthropogenic activities, beginning in the early part of the 20th century. Irrigated agriculture resulted in leaching of nitrates and other salts to the shallow groundwater. The Swamp of the Frogs was drained and a network of channels was created to convey wastewater to Upper Newport Bay. A large portion of this wastewater consists of "baseflow" (seepage from shallow groundwater). Although seleniferous bedrock and soils occur naturally in parts of the watershed, the drainage modifications in the watershed have resulted in increased selenium mobility. The concentration of selenium in the groundwater of the watershed is

not homogeneous and can vary widely depending on specific location within the watershed. Accordingly, the concentration of selenium in groundwater-related discharges in the watershed also varies widely.

Recent investigations into the sources of selenium and nutrients in the watershed have found that approximately 62-87 percent (%) of the base flows in San Diego Creek result from groundwater inflows to the creek, either naturally through subsurface flow, springs, and weepholes, or through groundwater dewatering and remediation operations. Approximately 96% of the selenium and 85% of the nitrate concentrations found in San Diego Creek and its tributaries result from these groundwater inputs<sup>3</sup>.

Chlordane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (DDT), toxaphene and PCBs are legacy organochlorine compounds that are no longer being actively used in the watershed. However, these compounds are highly persistent in the environment and while they have been banned for a number of years, they continue to be found in sediments and to accumulate in biota in the watershed. Historic uses of the organochlorine pesticides (chlordane, DDT and toxaphene) were predominantly agricultural and urban. PCBs were used extensively for many years as insulating fluids in electrical transformers and in other products such as cutting oils. PCBs were released into the environment through discharges from point sources and through spills and accidental releases.

Organochlorine compounds bioaccumulate in the fatty tissues of biological organisms and have been associated with reproductive impacts (most notably, eggshell thinning in birds due to DDE, a degradation product of DDT). Though the organochlorine compounds have low water solubility (i.e., are hydrophobic) and are therefore most often associated with fine sediments and organic particulates, DDT has been detected in groundwater in the watershed at concentrations exceeding the CTR criteria<sup>4</sup>. TMDLs for these compounds have been promulgated by USEPA and revised organochlorine compounds TMDLs were recently adopted by the Regional Board<sup>5</sup>. The Regional Board-approved TMDLs will not become effective until approved by the State Water Board and the Office of Administrative Law. USEPA approval of the TMDLs is also required. USEPA has indicated its intent to approve the TMDLs once the state approval process is complete. To implement the organochlorine compounds TMDLs promulgated by the USEPA, this Order requires Dischargers to conduct monitoring of discharges and will include a reopener provision that will enable the Regional Board to reopen the permit to include effluent limitations and other relevant requirements, if monitoring data indicate that discharges have the reasonable potential to cause or contribute to violations of organochlorine compound standards and TMDLs. These limitations and requirements will implement the organochlorine compounds TMDLs adopted by the Regional Board.

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<sup>3</sup> Meixner et al., 2004. *Sources of Selenium, Arsenic and Nutrients in the Newport Bay Watershed*. (Contract Report to the Santa Ana Regional Water Board)

<sup>4</sup> SARWQCB, 2006. *Total Maximum Daily Loads for Organochlorine Compounds, San Diego Creek, Upper and Lower Newport Bay, Orange County, California*. November 17, 2006 technical staff report.

<sup>5</sup> Resolution No. R8-2007-0024

Groundwater pollutant plumes often contain complex mixtures of hundreds of petroleum-related compounds (e.g., gasoline contains over 200 chemicals) or chlorinated hydrocarbons, which makes complete chemical analyses very expensive and sometimes impractical or impossible due to sample matrix interferences, constituent masking, or the lack of standard analytical techniques. Further, neither the State nor the USEPA<sup>6</sup> has proposed/established quality objectives for many of the petroleum hydrocarbon compounds. Therefore, indicator constituents for the detection and evaluation of complex mixtures of petroleum related compounds such as gasoline and diesel will be used in setting effluent limitations and monitoring groundwater discharged to surface waters in the Santa Ana Region<sup>7</sup>. The indicator constituents used for evaluating compliance for discharges of gasoline and diesel related products are benzene, toluene, ethylbenzene, xylene (BTEX) and total petroleum hydrocarbons. For chlorinated hydrocarbon solvents such as trichloroethylene (TCE) and tetrachloroethylene (PCE), the specific chemical constituents and/or their degradation products can be used to evaluate compliance with the permit limitations for these constituents specified in this Order.

Diesel fuel consists primarily of straight-chained hydrocarbons (alkenes and alkanes) ranging in length from C10 to C23, with C16 and C17 predominating. The C10-C23 straight-chain hydrocarbons in groundwater can be quantified using standard analytical techniques. Since the predominant components of diesel fuel are the straight-chain hydrocarbons, the California Department of Public Health's recommended analytical procedure for total petroleum hydrocarbons-diesel<sup>8</sup> is used to indicate groundwater polluted by diesel fuel.

To reduce the amount of carbon monoxide in the atmosphere and abate air pollution, oxygenated fuels were required by the USEPA in select metropolitan areas such as Southern California. Fuel oxygenates are also used to enhance the octane of conventional gasoline. Methyl tertiary-butyl ether (MTBE) has been the most commonly used fuel oxygenate. Oxygenates in limited commercial use also include ethyl tert-butyl ether (ETBE) and tert-amyl methyl ether (TAME), tert-butyl alcohol (TBA), methanol (MeOH), and diisopropyl ether (DIPE). Accidental releases of gasoline to the subsurface from underground storage tanks, pipelines, refueling facilities, and landfills provide point sources for entry of oxygenates into the hydrologic cycle, together with the gasoline hydrocarbons. MTBE, as well as other alkyl ether oxygenates, ETBE and TAME are much less biodegradable than BTEX hydrocarbons in ground water. Tert butyl alcohol (TBA) is also being detected in effluent streams and, like MTBE, poses a threat to water quality. Furthermore, the fuel oxygenates sorb only weakly to soil and aquifer material, thereby increasing the risk of groundwater contamination.

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<sup>6</sup> *United States Environmental Protection Agency*

<sup>7</sup> *It is believed that fuels have been adequately studied to justify limiting the analysis to these compounds (see "Leaking Underground Storage Tank Manual: guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure," State of California, Leaking Underground Fuel Tank Task Force, May 1988).*

<sup>8</sup> *Leaking Underground Fuel Tank (LUFT) Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, October 1989.*

Recent findings indicate the presence of MTBE in over 60% of surface water supply reservoirs and groundwater water supply wells in California. Data from a Lawrence Livermore National Laboratory study show that MTBE has been detected at over 4,600 leaking underground tank sites. Consequently, on March 26, 1999, the Governor concluded that the use of MTBE in California gasoline poses a significant risk to California's environment, and directed that MTBE be phased out of California gasoline as soon as possible. The risks to California's environment prompted the California Department of Public Health (CDPH) to establish a maximum contaminant level for MTBE in drinking water of 13 micrograms per liter.

1,2-Dichloroethane was used as an anti-knock additive in leaded fuels. 1,2-Dichloroethane (1,2-DCA) is a colorless, oily, organic liquid with a sweet, chloroform-like odor. The greatest use of 1,2-dichloroethane is in making chemicals involved in plastics, rubber and synthetic textile fibers. Other uses include: as a solvent for resins and fats, photography, photocopying, cosmetics, drugs; and as a fumigant for grains and orchards (EPA fact sheet).

In the past, 1,2,3-Trichloropropane (TCP) has been used primarily as a solvent and extractive agent. As a solvent, it has commonly been used as a paint and varnish remover, a cleaning and degreasing agent and a cleaning and maintenance solvent. It can be removed through granular activated carbon.

Vinyl Chloride (chloroethene or chloroethylene) is also being detected at low concentrations at sites with chlorinated solvents release. Vinyl Chloride is normally the result of the breakdown of chlorinated solvents. Due to its significant toxicity and regular presence in the soils and groundwater at chlorinated solvents release sites, effluent limitations for vinyl chloride are specified in this Order.

1,4-dioxane is a man-made compound primarily used as an industrial solvent or solvent stabilizer. 1,4-dioxane is generally not biodegradable and is effectively treated through an advance oxidation process in the form of ultraviolet light combined with hydrogen peroxide. This treatment breaks down the compound largely into carbon dioxide and water.

Perchlorate is both a naturally occurring and man-made chemical. Perchlorate is the primary ingredient of solid rocket propellant. Perchlorate affects human health by interfering with the uptake of iodide into the thyroid gland and disrupts the function of the thyroid. Biological treatment and ion (anion) exchange systems are among the technologies that are being used to remove perchlorate from water.

This Order regulates discharges to Newport Bay and surface waters within the San Diego Creek/Newport Bay watershed from groundwater dewatering operations where contaminated groundwater may be extracted and discharged, and from temporary or permanent remediation systems, operated to clean up groundwater contamination from petroleum based products, solvents and metals. This Order combines the applicable requirements specified in Order No. R8-2004-0021 and Order No. R8-2007-0008.

## **A. Description of Wastewater Treatment**

A number of treatment methods are available for the treatment of groundwater contaminated by petroleum hydrocarbons or chlorinated solvents. The more commonly used methods include air stripping, air sparging, granular activated carbon adsorption, UV-peroxidation, nutrient enhanced biodegradation, and a combination of two or more of the above technologies. To remediate subsurface soil contamination, vapor extraction systems and in-situ bio-remediation are commonly used. Most of these systems, if designed and operated properly, can lower the concentrations of the pollutants to below accepted detection limits.

Technologies that are currently being used to remove perchlorate from water include biological treatment and ion (anion) exchange. Nitrate can be removed by a variety of treatment options and best management practices (BMPs) using de-nitrification techniques (e.g., nutrient-enhanced biological degradation, treatment wetlands). At this time, there are no reasonably feasible treatment technologies for removal of selenium, although certain technologies have been pilot tested by the Nitrogen and Selenium Management Program (NSMP) Working Group (see IV. Applicable Plans, Policies and Regulations, E., below) and the Irvine Ranch Water District and appear promising. Discharges of selenium to surface waters may be reduced through the implementation of BMPs designed to reduce or even eliminate the volume of water discharged to surface waters. Organochlorine compounds (DDT and its isomers) have been removed from groundwater using a groundwater extraction system with carbon adsorption treatment vessels.

## **B. Discharge Points and Receiving Waters**

This Order authorizes discharges to Newport Bay and surface waters within the San Diego Creek/Newport Bay watershed. The beneficial uses of these receiving waters are described in Section IV.C.1., below.

## **C. Summary of Requirements Specified in Order No. R8-2007-0008 and Order No. R8-2004-0021.**

Order No. R8-2007-0008 includes effluent limitations for MUN designated and MUN-excepted surface waters for Total Petroleum Hydrocarbons, Benzene, Toluene, Xylene, Ethylbenzene, Carbon Tetrachloride, Chloroform, Dichlorobromomethane, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, Methyl Tertiary Butyl Ether (MTBE), Naphthalene, Tetrachloroethylene (PCE), Trichloroethylene (TCE), 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,2-Dichloroethylene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, 1,1,1-Trichloroethane (TCA), Tert Butyl Alcohol (TBA), 1,4-Dioxane, Perchlorate and lead. This Order includes effluent limitations and requirements of Order No. R8-2007-0008 that are applicable to surface waters that are excepted from MUN beneficial use.

Order No. R8-2004-0021 includes effluent limitations for selenium and nutrients for discharges of wastewater into the San Diego Creek/Newport Bay Watershed. This Order includes effluent limitations and requirements of Order No. R8-2004-0021 that are applicable to surface waters that are excepted from MUN beneficial use.

Newport Bay and all surface waters within the San Diego Creek/ Newport Bay watershed are excepted from the MUN beneficial use. Accordingly, this Order includes effluent limitations applicable to discharges to surface waters that are excepted from MUN beneficial use.

#### **D. Compliance Summary - Not Applicable**

#### **E. Planned Changes - Not Applicable**

### **IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

The requirements contained in this Order are based on the requirements and authorities described in this section.

#### **A. Legal Authorities**

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and its implementing regulations adopted by the USEPA, and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for the point source discharges described herein to Newport Bay and surface waters within the San Diego Creek/Newport Bay Watershed. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).

Pursuant to NPDES regulations at 40 CFR 122.28, States may request authority to issue general NPDES permits. On June 8, 1989, the State Water Board applied to the USEPA requesting revisions to its NPDES Program in accordance with 40 CFR 122.28, 123.62, and 403.10, including a request to add general permit authority to its approved NPDES Program. On September 22, 1989, the USEPA, Region 9, approved the State Water Board's request, granting authorization for the State to issue general NPDES permits.

Pursuant to NPDES regulations at 40 CFR 122.28 (a) (2) general permits may be regulate point source discharges that:

1. Involve the same or substantially similar types of operations,
2. Discharge the same types of wastes,
3. Require the same effluent limitations,
4. Require the same or similar monitoring, and
5. In the opinion of the Executive Officer, are more appropriately controlled under a general permit than under individual permits.

## **B. California Environmental Quality Act (CEQA)**

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code section 21000 et seq. (*County of Los Angeles v. California State Water Resources Control Board* (2006) 143 Cal.App.4th 985, mod. (Nov. 6, 2006, B184034) 50 Cal.Rptr.3d 619, 632-636.).

## **C. State and Federal Regulations, Policies, and Plans**

- 1. Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Santa Ana Basin (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 (Sources of Drinking Water Policy) requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic water supply use to water bodies.

On January 22, 2004, the Regional Water Board adopted Resolution No. R8-2004-0001, amending the Basin Plan to incorporate revised boundaries for groundwater subbasins, now termed “management zones”, new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. The State Water Resources Control Board and Office of Administrative Law (OAL) approved the N/TDS Amendment on September 30, 2004 and December 23, 2004, respectively. EPA approved the surface water standards components of the N/TDS Amendment on June 20, 2007.

The existing and potential beneficial uses of Newport Bay and San Diego Creek include:

- a. Navigation,
- b. Water Contact Recreation,
- c. Non-contact Water Recreation,
- d. Commercial and Sportfishing,
- e. Preservation of Biological Habitats of Special Significance,
- f. Wildlife Habitat,
- g. Rare, Threatened or Endangered Species,
- h. Spawning, Reproduction, and Development,
- i. Marine Habitat,
- j. Shellfish Harvesting,
- k. Estuarine Habitat,
- l. Warm Freshwater Habitat, and
- m. Groundwater Recharge (intermittent beneficial use).



Many surface waters within the region recharge underlying groundwater basins. The existing and potential beneficial uses of groundwater within the Newport Bay/San Diego Creek Watershed include:

- a. Municipal and Domestic Supply,
- b. Agricultural Supply,
- c. Industrial Service Supply, and
- d. Industrial Process Supply.

The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (the Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters of the State.

This Order implements applicable provisions of the Basin Plan and the Thermal Plan, as well as the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP)(see 3., below).

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. Approximately forty water quality criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR, which established new criteria for toxics in the State and incorporated the previously adopted criteria of the NTR. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority toxic pollutants applicable to inland surface waters, enclosed bays, and estuaries of the State.
3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for toxicity control. Requirements of this Order implement the SIP.

- 4. Alaska Rule.** On March 30, 2000, at 40 CFR 131.32, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. [65 Fed. Reg. 24641 (April 27, 2000)] Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA before May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- 5. Antidegradation Policy.** NPDES regulations require that State water quality standards include an antidegradation policy consistent with the federal policy established at 40 CFR 131.12. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Basin Plan implements and incorporates by reference both the state and federal antidegradation policies. The discharges authorized under this Order are consistent with applicable antidegradation provisions of NPDES regulations at 40 CFR 131.12 and with State Water Board Resolution No. 68-16.
- 6. Anti-Backsliding Requirements.** CWA Sections 402 (o) (2) and 303 (d) (4) and NPDES regulations at 40 CFR 122.44 (l) prohibit backsliding in NPDES permits; i.e., effluent limitations in a reissued permit must be at least as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. This Order/General Permit is consistent with applicable anti-backsliding requirements. The limitations in this Order are not less stringent than those in the prior Orders/General Permits.

#### **D. Impaired Water Bodies on CWA 303(d) List**

Section 303(d) of the CWA requires states to identify water bodies where water quality standards are not expected to be met after technology-based effluent limitations have been implemented for point sources. For all 303(d)-listed water bodies and pollutants, the Regional Water Board has developed and/or plans to develop total maximum daily loads (TMDLs) that specify waste load allocations (WLA) for point sources and load allocations (LA) for non-point sources. These allocations form the basis, in part, for limitations in waste discharge requirements.

In June 2007, the USEPA approved the State's 2004-2006-303(d) list of impaired water bodies. This list included Reaches 1 and 2 of San Diego Creek and Upper and Lower Newport Bay. One or more of these water bodies were determined to be impaired by one or more of the following: fecal coliform, nutrients, metals, pesticides (including organochlorine pesticides), PCBs and selenium. TMDLs have been developed to address these impairments. Section D describes the requirements of the nutrient TMDL, section E describes the requirements of the selenium TMDL, and section F describes the requirements of the organochlorine compounds TMDLs, which are relevant to this Order.

## E. Nutrient TMDL.

On April 17, 1998, the Regional Water Board adopted Resolution No. 98-9, amending the Basin Plan to incorporate a Nutrient Total Maximum Daily Load (TMDL) for the Newport Bay/San Diego Creek Watershed. The TMDL was amended by Resolution No. 98-100 on October 9, 1998 and thereafter approved by the State Water Resources Control Board, Office of Administrative Law and the USEPA. The nutrient TMDL was developed to address aesthetic and recreational nuisances created by algal blooms in Newport Bay, as well as the concern that these blooms may adversely affect wildlife. The TMDL establishes final targets that are based on a 50% reduction in nitrogen loading. The TMDL requires that the 50% reduction be achieved no later than December 31, 2007 for summer loading (between April 1 and September 30); the 50% reduction in winter inputs (between October 1 and March 31) is to be achieved no later than December 31, 2012. While the TMDL requires reductions in nutrient loadings, it is recognized that too few nutrients in a waterbody can potentially adversely affect wildlife.

Consistent with the TMDL targets, the nutrient TMDL specifies wasteload and load allocations for total nitrogen mass inputs to the San Diego Creek/Newport Bay watershed from identified sources<sup>9</sup>. Nitrogen load allocations are specified for “undefined sources”, which include rising groundwater, discharges associated with groundwater cleanup and dewatering, atmospheric deposition, open space inputs and in-bay sediment nitrogen. Again consistent with the TMDL targets, the load allocations for undefined sources require a 50% reduction in summer inputs by 2007, and a 50% reduction in winter inputs by 2012.

For the 2006 summer season, the measured total nitrogen (TN) load into Newport Bay was about 141,000 lbs. This is slightly below the summer 2007 TMDL target of 153,861 lbs, but does not include in-bay nutrient supply from sediment. Research conducted by the Southern California Coastal Research Project (SCCWRP) has shown that the flux of nutrients from sediments in Newport Bay is significant, and of the same order-of-magnitude as the loading from the watershed.

TN loads contributed by groundwater dewatering and cleanup discharges amounted to 26,309 lbs (24,438 and 1,871 lbs, respectively). The 50% reduction for the dewatering loads regulated under Order No. R8-2004-0021<sup>10</sup> is provided by an offset from the Irvine Ranch Water District (IRWD) constructed wetlands in the San Joaquin Freshwater Marsh. Denitrification in the IRWD wetlands removed 33,447 lbs of nitrogen from San Diego Creek during summer 2006. Discharges not covered by the wetlands offset must either implement a 50% reduction or cease discharging to surface water.

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<sup>9</sup> The TMDL assigns phosphorus load allocations to open space and agricultural areas. No phosphorus load allocations are specified for groundwater-related discharges since these discharges are not expected to include phosphorus.

<sup>10</sup> Order No. R8-2004-0021 regulates short-term groundwater-related discharges, including dewatering discharges. Short-term discharges are defined as those lasting one year or less.

An estimate of the nitrogen loads that would be regulated by this Order is approximately 25,000 lbs. (Discharges from MCAS<sup>11</sup> Tustin – about 1,800 lbs/season – are proposed to be routed out of the watershed via a sewer link to the Orange County Sanitation District (OCSD)). This estimate would fluctuate depending on the number of temporary dewatering operations that are active.

The nutrient TMDL is currently being reviewed and new water quality objectives for San Diego Creek will be proposed in 2008. The revised TMDL and new water quality objectives would likely require further reductions in nitrogen loads from groundwater dewatering and cleanup operations. This Order will be re-opened as necessary to address relevant requirements of the revised TMDL.

The Nutrient TMDL implementation plan supports the trading of pollutant allocations, where appropriate, as a potentially cost-effective method to achieve pollutant reduction. There is an ongoing effort by watershed stakeholders to design and implement a regional program to achieve the nitrogen reductions required by the TMDL (natural treatment systems). Implementation of this program, with participation by the groundwater Dischargers, will likely enable the Dischargers to achieve the requisite nitrogen mass reductions to Newport Bay, particularly when coupled with nitrogen removal accomplished by IRWD's constructed wetlands.

On December 20, 2004, the Regional Water Board adopted Order No. R8-2004-0021, NPDES No. CAG998002, to regulate short-term groundwater-related discharges and de minimus wastewater discharges to surface waters within the San Diego Creek/Newport Bay Watershed. This Order was adopted, in part, to assure that discharges of nitrogen (and selenium) were regulated appropriately to implement the nutrient (and selenium) TMDLs. Certain of the short-term and long-term Dischargers of groundwater-related wastewaters within the watershed have agreed to form a Nitrogen and Selenium Management Program Working Group (NSMP Working Group, or Working Group) to address the requirements of this Order. The Working Group has committed to fund and participate in a Work Plan. The tasks include the development of a nutrient offset, trading or mitigation program that is to be based on a comprehensive understanding of the groundwater-related nutrient inputs to surface waters in the Newport Bay watershed.

Completion of the approved Work Plan is expected to result in the development of a comprehensive management plan for nitrogen (selenium see discussion below) in groundwater-related inflows to surface waters in the Newport Bay watershed and as such, goes beyond issues specific to the discharges regulated under this Order. The management plans are expected to provide recommendations for specific load and wasteload allocations for the groundwater-related components of the "undefined source" category identified in the TMDL, in addition to offset, trading or mitigation program recommendations. Revisions to the TMDL and/or to the nutrient-related requirements in this Order may be necessary based on the results of the Work Plan assessments and resultant management plans.

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<sup>11</sup> MCAS = Marine Corps Air Station

This Order implements relevant requirements of the Nutrient TMDL. To implement the nutrient TMDL, this Order includes a total nitrogen effluent limit of 1 mg/L for groundwater dewatering discharges to San Diego Creek, which is tributary to Newport Bay. Dischargers may comply with this requirement by implementing a nitrogen offset program, such as participation in the diversion and treatment of San Diego Creek flows in the IRWD constructed wetlands in the San Joaquin Freshwater Marsh or in the implementation of the Natural Treatment System (NTS), and/or by implementing other nitrogen management strategies identified through the NSMP.

## **F. Selenium TMDLs**

On June 14, 2002, the USEPA Region 9 established TMDLs for 14 toxic pollutants, including selenium, for San Diego Creek and Newport Bay. The selenium TMDLs are based on the selenium criteria specified in the CTR and in the NTR. The EPA TMDLs for selenium identified loading targets for specific groups of discharges but recognized that quantification of the baseline loading from Dischargers of groundwater was infeasible due to the lack of selenium data. The EPA TMDLs do not include specific implementation requirements, such as compliance timeframes, interim numeric targets, etc, since implementation plans are the responsibility of the Regional Water Board. However, pursuant to federal regulations, the Regional Water Board is required to ensure that NPDES permits for discharges in this watershed contain effluent limitations necessary to be consistent with the wasteload allocations specified in the selenium TMDLs (and other TMDLs). In the absence of an adopted implementation plan, the Regional Water Board can and must employ its legally authorized discretion in determining the appropriate permit provisions to implement these allocations. Regional Water Board staff is now working on an implementation plan for the selenium TMDLs, which will be considered for future adoption as a Basin Plan amendment. Staff may also recommend revisions to the selenium TMDLs established by EPA based on ongoing and forthcoming studies by EPA, Board staff and others. In its documents establishing the toxic TMDLs, EPA recognizes the substantial uncertainties that remain concerning selenium sources, biological effects, and the appropriate numeric objective that should apply to the protection of beneficial uses. EPA is now engaged in a review of the selenium objective in the CTR. Resolution of these uncertainties, and possible revision of the numeric selenium objective by EPA or through a site-specific objective process, is likely to require future refinement of the selenium TMDL. Any such refinement would necessitate review and revision, as appropriate, of this Order. The lack of a readily available, practicable selenium treatment technology that can assure compliance with selenium discharge limitations is also recognized. Absent identification of effective and reasonable treatment technologies, source controls or pollution reduction measures for selenium, development of a site-specific objective for selenium in the Newport Bay watershed will be appropriate.

In response to the selenium-related requirements of Order No. R8-2004-0021 and to the acknowledged difficulty of achieving compliance with selenium effluent limitations because of the lack of a practicable selenium treatment technology, the Work Plan developed by the NSMP Working Group (see discussion in E. Nutrient TMDL, above) includes the development of a selenium site-specific objective, evaluation of potential selenium treatment technologies and BMPs, and an offset, trading or mitigation program that is to be based on a comprehensive understanding of the groundwater-related selenium inputs to surface waters in the Newport Bay watershed.

Completion of the approved Work Plan is expected to result in the development of a comprehensive management plan for selenium in groundwater and surface waters in the Newport Bay watershed and as such, goes beyond issues specific to the discharges regulated under this Order. Revisions to the TMDLs and/or to the selenium-related requirements in this Order may be necessary based on the results of the Work Plan assessments, resultant management plans, and the adoption of site-specific selenium objectives.

Both the CTR and the State Policy include provisions for compliance schedules for effluent limitations for selenium and other priority pollutants. Pursuant to the State Policy, up to five years from the date of adoption of waste discharge requirements that implement the CTR criteria may be allowed to complete actions necessary to comply with CTR-criterion-based effluent limitations. These actions include the development and adoption of a site-specific objective, if appropriate, as provided in the Policy (Section 5.2). If the compliance schedule exceeds one year, interim limitations must be specified in NPDES permits and interim requirements to control the pollutant for which the compliance schedule is included may be imposed. These interim requirements may include pollutant minimization and source control measures. This Order requires that the Dischargers meet the selenium final limit by December 20, 2009. This is the same compliance date specified for Dischargers regulated under the General Permit Order No. R8-2004-0021 and the City of Irvine's long-term groundwater-related discharges regulated under Order No. R8-2005-0079, NPDES No. CA8000406.

This Order implements relevant provisions of the CTR, the EPA selenium TMDLs for San Diego Creek and Newport Bay, and the SIP by specifying interim performance-based and final numeric effluent limitations for selenium for the treated groundwater discharges. The Dischargers must implement selenium reduction through reasonable treatment, source control, or pollution prevention measures when such measures become available during the five-year permit term. This Order requires that if a practicable selenium treatment technology becomes available, the Discharger shall implement that technology and comply with the final selenium limits in this Order within one year of notification of the need to do so by the Regional Board. In addition, the Dischargers may be able to reduce or eliminate selenium concentrations and mass discharges by the implementation of low technology best management practices (BMPs). Such volume-reduction and other BMPs will be investigated in an aggressive manner, including an evaluation of other potential positive and negative impacts that may result from the BMPs.

## G. Organochlorine Compounds TMDLs

On June 14, 2002, USEPA Region 9 established TMDLs for 14 toxic pollutants, including five organochlorine compounds, for San Diego Creek, Upper and Lower Newport Bay, and Rhine Channel. The organochlorine (OC) compounds included four legacy pesticides (1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane [DDT], chlordane, dieldrin and toxaphene) and polychlorinated biphenyls (PCBs). TMDLs were established for chlordane, total DDT, and total PCBs in all these waterbodies; dieldrin TMDLs were established for San Diego Creek, Lower Newport Bay, and Rhine Channel; and a TMDL for toxaphene was established only for San Diego Creek (USEPA, 2002).

In September 2004, the Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List (2004) (the State Listing Policy) was adopted. Impairment due to the organochlorine compounds in Newport Bay and San Diego Creek was reevaluated in accordance with this new Policy. The results of this impairment assessment differed from that previously performed by USEPA in that the water body-pollutant combinations requiring TMDLs were revised, consistent with the new findings of impairment. The loading capacities and existing loads were also revised to reflect corrections and modifications to the USEPA technical TMDLs.

On September 7, 2007, the Regional Board adopted a Basin Plan amendment to incorporate TMDLs for total DDT and toxaphene in San Diego Creek and total DDT, chlordane and total PCBs for Upper and Lower Newport Bay. Informational TMDLs were also adopted for chlordane and total PCBs in San Diego Creek. EPA has indicated support for these revised TMDLs; therefore, the stakeholders and Regional Board staff are moving forward with implementation of the revised organochlorine compounds TMDLs in accordance with the September 7, 2007 Basin Plan Amendment.

The organochlorine compounds TMDLs include numeric targets based on the CTR ambient water quality criteria. The CTR states that it is inappropriate to adjust to percent dissolved for bioaccumulative compounds such as organochlorine pesticides and PCBs even though these compounds have low water solubility. Organochlorine pollutants tend to tightly sorb to soil organic matter; however, they have been detected in both soil and groundwater<sup>12</sup>—DDT has been detected in groundwater in at least one location in the watershed. As these compounds are highly persistent in the environment, over very long periods of time they may eventually leach into groundwater, especially in soils that contain little organic matter.

Given the absence of relevant data with which to determine reasonable potential pursuant to the SIP, this Order requires monitoring for organochlorine compounds but does not include effluent limitations. The results of the monitoring will be used to determine whether it is appropriate to reopen the Order to specify effluent limitations consistent with the organochlorine compounds TMDLs.

<sup>12</sup>

## **H. Other Plans, Policies and Regulations**

In most areas of the watershed, there is no significant amount of receiving water at the point of discharge. Therefore, no mixing zone allowance is included in the calculation of effluent limits. Consequently, compliance with the effluent limits is required to be determined at the end of the discharge pipe or at a location prior to where the discharge enters the receiving water.

## **V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source Dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs may be established: (1) using USEPA criteria guidance under CWA section 304 (a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

### **A. Discharge Prohibitions**

The discharge prohibitions are based on the Federal Clean Water Act, Basin Plan, State Water Resources Control Board's plans and policies, U.S. Environmental Protection Agency guidance and regulations, and previous permits Orders No. R8-2004-0021 and R8-2007-0008 provisions, and are consistent with the requirements set for other discharges regulated by NPDES permits adopted by the Regional Water Board.

### **B. Technology-Based Effluent Limitations**

#### **1. Scope and Authority**

CWA Section 301 (b) and NPDES regulations at 40 CFR 122.44 require permits to, at a minimum, meet applicable technology-based requirements and any more stringent effluent limitations necessary to meet applicable water quality standards. The CWA requires the USEPA to develop effluent limitations, guidelines and standards (Effluent Limitations Guidelines - ELGs) representing application of best practicable treatment control technology (BPT), best available technology economically achievable (BAT), best conventional pollutant control technology (BCT), and best available demonstrated control technology for new sources (NSPS),



for specific industrial categories. Where USEPA has not yet developed ELGs for a particular industry or a particular pollutant, Section 402 (a) (1) of the CWA and USEPA regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 CFR 125.3.

## **2. Applicable Technology-Based Effluent Limitations**

### **a. Petroleum and Chlorinated Hydrocarbons**

Effluent limitations guidelines for petroleum and chlorinated hydrocarbons have not been developed for the category of Dischargers authorized to discharge by this Order. However, since authorized Dischargers are discharging treated wastewaters, it is appropriate to establish technology-based effluent limitations using Best Professional Judgment (BPJ). This Order establishes technology-based effluent limitations.

- b. 1,2,3-trichloropropane (TCP) is a chemical of concern. The current technology that is used to remove TCP from discharges has successfully reduced concentration of TCP below the detection limit of 0.5 µg/L. This is the basis for the effluent limitation for TCP in this Order.

## **C. Water Quality-Based Effluent Limitations (WQBELs)**

### **1. Scope and Authority**

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

## 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

This Order authorizes certain discharges to surface waters within the San Diego Creek/Newport Bay Watershed. Beneficial uses of these receiving waters, as designated by the Basin Plan are described in Section IV.C.1., above. The water quality criteria applicable to these receiving waters are established by the NTR, CTR, and Basin Plan.

- a. The Basin Plan includes the following narrative and numeric water quality objectives applicable to surface waters.

TDS: TDS limitations are specified in this Order for discharges to surface waters. The proposed TDS limits for direct discharges into surface waters within the San Diego Creek/Newport Bay watershed are based on the objectives specified in Table 4-1 of the amended Basin Plan and are shown in Table below:

**Table 1. TDS Water Quality Objectives of Surface Water**

| Inland Surface Waters    | TDS, mg/L |
|--------------------------|-----------|
| Reach 1, San Diego Creek | 1500      |
| Reach 2, San Diego Creek | 720       |

TIN. As discussed in Section III.D., above, the nutrient TMDL specifies wasteload and load allocations for total nitrogen mass inputs to the San Diego Creek/Newport Bay watershed from identified sources<sup>13</sup>. Nitrogen load allocations are specified for “undefined sources”, which include rising groundwater, discharges associated with groundwater cleanup and dewatering, atmospheric deposition, open space inputs and in-bay sediment nitrogen. The load allocations for undefined sources require a 50% reduction in summer nitrogen inputs by 2007, and a 50% reduction in winter nitrogen inputs by 2012.

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*The TMDL assigns phosphorus load allocations to open space and agricultural areas. No phosphorus load allocations are specified for groundwater-related discharges since these discharges are not expected to include phosphorus.*

- b. Unless specified in sections V.A.3. and V.A.4. of the Order, for discharges to surface waters where discharges percolate into the ground and there is no surface water quality objective, the effluent TDS/TIN concentration limit in the Order is based on the groundwater water quality objective for Irvine Groundwater Management Zone, as shown in Table 2, below:

**Table 2. TDS/TIN Water Quality Objectives of GMZ**

| Groundwater Management Zone | TDS, mg/L | TIN, mg/L |
|-----------------------------|-----------|-----------|
| Irvine                      | 910       | 7.9       |

However, treated effluent exceeding the groundwater management zone water quality objectives may be returned to the same management zone from which it was extracted without reduction of the TDS or TIN concentrations so long as the concentrations of those constituents are no greater than when the groundwater was first extracted. Incidental increases in the TDS and TIN concentrations (such as may occur during air stripping) of treated effluent will not be considered increases for the purposes of determining compliance with this discharge specification.

- c. CTR and SIP

The California Toxics Rule (CTR) and State Implementation Policy specify numeric objectives for toxic substances and the procedures whereby these objectives are to be implemented. The procedures include those used to conduct reasonable potential analysis to determine the need for effluent limitations for priority and non-priority pollutants.

The CTR specifies numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants. These criteria apply to inland surface waters and enclosed bays and estuaries within the Santa Ana Region.

Selenium. As discussed in Section IV.F. above, USEPA Region 9 established total maximum daily loads (TMDLs) for selenium for San Diego Creek and Newport Bay on July 14, 2002. The selenium TMDLs are based on the selenium criteria specified in the CTR and in the NTR.

Effluent Limits for Carbon Tetrachloride, Dichlorobromomethane, Tetrachloroethylene, Trichloroethylene and 1,1-Dichloroethylene are based on the CTR Human Health values.

**b. Maximum Contaminant Levels**

The limits for benzene, methyl tertiary butyl ether (MTBE), cis-1,2-dichloroethylene, 1,2 dichloroethane, vinyl chloride and trans-1,2-dichloroethylene, are based on CDPH Maximum Contaminant Levels (MCLs).

**3. Determining the Need for WQBELs**

NPDES regulations at 40 CFR 122.44(d)(1)(i) require permits to include WQBELs for all pollutants (non-priority or priority) “which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any narrative or numeric criteria within a State water quality standard” (have Reasonable Potential). Thus, assessing whether a pollutant has Reasonable Potential is the fundamental step in determining whether or not a WQBEL is required.

**4. WQBEL Calculations**

Discharge limitations for metals are also included in this Order. For discharges to fresh water and enclosed bays and estuaries, the limits are based on the California Toxics Rule metals objectives. For freshwater, certain metal objectives are equations in which hardness is the variable. The actual numeric value of the objectives is calculated using hardness measurements. To determine the effluent limitation for a specific metal constituent for each freshwater discharge, and to facilitate the determination of compliance, a fixed effluent hardness value will be used in the objective equations. Federal regulations require that the effluent limits for metals be expressed as the total recoverable form. To comply with this requirement, the dissolved criteria are translated into total recoverable effluent limits using ratios of the total recoverable metals to dissolved metals (t/d) concentrations. The State Implementation Policy stipulates that in the absence of site-specific information, the conversion factors cited in the CTR should be used as the t/d translators. This Order includes a tabulation of calculated effluent limits for metals corresponding to fixed hardness values (20 through 400 milligrams per liter) (see Attachment “B”). The calculations for arriving at the effluent limits for metals are in the Regional Water Board's file for this general permit. At sites polluted with metal constituents, the Discharger is required to submit hardness values for the discharge that will be used in determining the appropriate numeric limit for that specific metal constituent(s) in the discharge. The fixed hardness value, which shall be based on the 5th percentile of effluent hardness measurements or the ambient receiving water hardness measurements (whichever is more restrictive), shall be determined and submitted for approval by the Executive Officer of the Regional Water Board. Upon approval of the hardness value for the discharge, the effluent limit for metals discharges to freshwater bodies is determined from the table. For direct discharge to the Newport Bay, salt water criteria apply and are used as the basis for calculating effluent limitations.

Step 6 of the permit limit calculation procedure specified in the SIP stipulates that the average monthly effluent limitation is set equal to the effluent concentration allowance<sup>14</sup>. Where there is no mixing zone allowance and a California Toxics Rule human health objective applies, the effluent concentration allowance is equal to the applicable human health objective. Therefore, in these circumstances, the average monthly limit (AML) is equal to the human health objective. The SIP stipulates that where receiving waters are designated with the municipal water supply beneficial use (MUN), the human health objective for the consumption of water and organisms applies in calculating the effluent limitation; where the water is excepted from MUN, the human health objective for the consumption of organisms only applies. This Order includes effluent limits for discharges to receiving waters that are not designated MUN since all identified surface waters in the San Diego Creek/Newport Bay Watershed are excepted from the MUN beneficial use. For discharges to receiving waters, the AMLs were taken either from the California Toxics Rule human health objectives for the consumption of organisms only or from the CDPH's MCL. Each AML effluent limitation was multiplied by a 2.01 factor to determine the maximum daily concentration effluent limit. This factor is the average monthly effluent limit multiplier taken from Table 2 of the Policy. The multiplier corresponds to a coefficient of variation of 0.6 and number of samples equal to 4. This Order includes average monthly limit and maximum daily limits as required by federal regulations and the State Implementation Policy.

No mixing zone allowance is included in the calculation of effluent limits in this Order and, consequently, compliance with the effluent limits is required to be determined at the end of the discharge pipe for freshwater discharge. If a Discharger requests that a mixing zone allowance be included in the determination of appropriate effluent limits, a dilution model must be provided for approval.

Table 3 below shows the calculations for deriving effluent limitations for metals that are not hardness dependent, including other constituents for freshwater discharges. Effluent limitations for hardness dependent metals for freshwater discharges are tabulated in Attachment B of the Order. Table 4 below, shows the calculations for deriving effluent limitations for metals for saltwater discharges. Table 5 below shows the basis and calculations for effluent limitations for volatile organic compounds and other constituents.

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*The EFFLUENT CONCENTRATION ALLOWANCE (ECA) is a value derived from the water quality objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).*

**Table 3. Effluent Limitation Calculation**  
**Freshwater Discharges**  
**NOT-HARDNESS DEPENDENT METALS AND OTHER CONSTITUENTS**

| Constituent  | unit in ug/l |     |              | CV = 0.6  |             |              | Aquatic          |        | Human         |       | Permit Limit        |       |
|--------------|--------------|-----|--------------|-----------|-------------|--------------|------------------|--------|---------------|-------|---------------------|-------|
|              | Caltoxics    |     |              | Acute M   | Chronic M   | LTA          | Objective/limits |        | Health Limits |       | Concentration Limit |       |
|              | Freshwater   |     | Human Health | 0.321     | 0.527       |              | 3.11             | 1.55   | 2.01          |       |                     |       |
|              | CMC          | CCC | Organic Only | Acute LTA | Chronic LTA |              | MDEL             | AMEL   | MDEL          | AMEL  | MDEL                | AMEL  |
| Arsenic      | 340          | 150 |              | 109.14    | 79.05       | <b>79.05</b> | 246              | 122.53 |               |       | 246                 | 123   |
| Chromium, VI | 16           | 11  |              | 5.14      | 5.80        | <b>5.14</b>  | 15.97            | 7.96   |               |       | 16                  | 8.0   |
| Mercury      |              |     | 0.051        |           |             |              |                  |        | 0.102         | 0.051 | 0.102               | 0.051 |
| Selenium     |              | 5.0 |              | 0.00      | 2.64        | <b>2.64</b>  | 8.19             | 4.08   |               |       | 8.2                 | 4.1   |

**Table 4. Effluent Limitation Calculation**  
**Newport Bay/Saltwater Discharges**

| Constituent | unit in ug/l |     |              | CV = 0.6  |             |              | Aquatic          |       | Human         |       | Permit Limit        |       |
|-------------|--------------|-----|--------------|-----------|-------------|--------------|------------------|-------|---------------|-------|---------------------|-------|
|             | Caltoxics    |     |              | Acute M   | Chronic M   | LTA          | Objective/limits |       | Health Limits |       | Concentration Limit |       |
|             | Saltwater    |     | Human Health | 0.321     | 0.527       |              | 3.11             | 1.55  | 2.01          |       |                     |       |
|             | CMC          | CCC | Organic Only | Acute LTA | Chronic LTA |              | MDEL             | AMEL  | MDEL          | AMEL  | MDEL                | AMEL  |
| Arsenic     | 69           | 36  |              | 22.15     | 18.97       | <b>18.97</b> | 59               | 29.41 |               |       | 59                  | 29    |
| Cadmium     | 42           | 9.3 |              | 13.48     | 4.90        | <b>4.90</b>  | 15.24            | 7.60  |               |       | 15                  | 7.6   |
| Chromium VI | 1100         | 50  |              | 353.10    | 26.35       | <b>26.35</b> | 81.95            | 40.84 |               |       | 82                  | 41    |
| Copper      | 5            | 3   |              | 1.54      | 1.63        | <b>1.54</b>  | 4.79             | 2.39  |               |       | 4.8                 | 2.4   |
| Lead        | 210          | 8.1 |              | 67.41     | 4.27        | <b>4.27</b>  | 13.28            | 6.62  |               |       | 13                  | 6.6   |
| Mercury     |              |     | 0.051        |           |             |              |                  |       | 0.102         | 0.051 | 0.102               | 0.051 |
| Nickel      | 74           | 8   |              | 23.75     | 4.32        | <b>4.32</b>  | 13.44            | 6.70  |               |       | 13                  | 6.7   |
| Selenium    | 290          | 71  |              | 93.09     | 37.42       | <b>37.42</b> | 116.37           | 58.00 |               |       | 116                 | 58    |
| Silver      | 1.9          |     |              | 0.61      | 0.00        | <b>0.61</b>  | 1.90             | 0.95  |               |       | 1.9                 | 0.95  |
| Zinc        | 90           | 81  |              | 28.89     | 42.69       | <b>28.89</b> | 89.85            | 44.78 | 90            | 45    | 90                  | 45    |

## **5. Whole Effluent Toxicity (WET)**

This Order does not specify numeric WET limits. However, this Order requires that the discharge shall not result in acute toxicity in ambient receiving waters. The effluent is deemed to cause acute toxicity when the toxicity test of 100% effluent as required in monitoring and reporting program, results in failure of the test as determined using the pass or fail test protocol specified in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA/821-R-02-012, October 2002).

### **D. Best Professional Judgment-Based Effluent Limitations**

The applicable limits for total petroleum hydrocarbons, toluene, ethylbenzene, xylenes, chloroform, 1,2-Dichloroethylene and naphthalene are carried over from Order No. R8-2007-0008 and are based on Best Professional Judgment (BPJ).

Since 1991, the same effluent limits for 1,2-Dichloroethylene have been included in permits regulating these discharges. However in 2003, effluent limitations for the two isomers (Cis and Trans) that make up 1,2-Dichloroethylene were added. To avoid triggering the antibacksliding provisions of the federal regulations, the effluent limitations for 1,2-Dichloroethylene are retained, with the specific condition that the sum of the isomers Cis 1,2-Dichloroethylene and trans 1,2-Dichloroethylene shall not exceed the effluent limitations for 1,2-Dichloroethylene.

This Order specifies limits for methyl isobutyl ketone(MIBK), Tert Butyl Alcohol (TBA), 1,4-dioxane, perchlorate and methyl ethyl ketone (MEK) that are the same as those specified in Order No. R8-2007-0008 and were based on notification levels identified by the California Department of Public Health/Office of Environmental Health Hazard Assessment (OEHHA). (In the case of MEK, the notification level is for methyl isobutyl ketone (MIBK), which is in the same class of liquid organic compounds as MEK).

### **D. Discharge Specifications**

Discharge limitations are included in this Order for those other chemicals of concern that typically pollute groundwater at service stations and similar sites within the San Diego Creek/Newport Bay watershed. In addition, the monitoring program includes analyses for additional constituents to determine the overall impact of individual discharges and to screen for unexpected chemicals.

Discharge Limitations established by this Order require authorized Dischargers to compare effluent data, generated through routine monitoring, to effluent limitations. Exceedance of any of the specified effluent limitations may trigger mandatory minimum penalties, accelerated monitoring for certain constituents and may lead to discontinuance of coverage under this General Permit. The Discharge Specifications impose specific effluent limitations, assuring that authorized discharges are not creating adverse impacts

on receiving water quality. When adverse impacts are highlighted following exceedance of an effluent limitation(s), Dischargers are directed to confirm the findings, to mitigate impacts, to sewer or stop the discharge and/or to seek coverage under an individual NPDES permit.

## **E. Final Effluent Limitations**

### **1. Satisfaction of Anti-Backsliding Requirements**

All effluent limitations in this Order are at least as stringent as the effluent limitations in Orders No. R8-2007-0008 and R8-2004-0021. See also D, above.

### **2. Satisfaction of Antidegradation Policy**

Discharges in conformance with the requirements of this Order will not result in a lowering of water quality and therefore conform to antidegradation requirements specified in Resolution No. 68-16, which incorporates the federal antidegradation policy at 40 CFR 131.12 where, as here, it is applicable.

### **3. Stringency of Requirements for Individual Pollutants**

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR Section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. Apart from certain standards changes resulting from the N/TDS Basin Plan amendment, all beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to section 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

### **4. Basis and Summary of Final Effluent Limitations for VOC Compounds and other Organics. The following Table 5 shows the basis for effluent limitations. (See also Tables 1, 2, 3 and 4 above)**



**Table 5. Limitations Applicable to Discharges into Receiving Waters - Not Designated as MUN**

| Constituent                               | Current Limitations                      |   | Basis of Limitations |             |            |                                  |                             |
|---|--|---|----------------------|-------------|------------|----------------------------------|-----------------------------|
|   | Maximum Daily Concentration Limit (µg/L) | Average Monthly Concentration Limit, (µg/L) | MCL (µg/L)           | CTR, (µg/L) |            |                                  |                             |
|   |  |   |                      | Fresh Water | Salt water | Human Health Water and Organisms | Human Health Organisms only |
| Benzene                                   | 2  | 1   | [1]                  |             |            | 1.2                              | 71                          |
| Toluene                                   | 20                                       | 10  | 150                  |             |            | 6800                             | 200000                      |
| Xylenes                                   | 20.                                      | 10  | 1750                 |             |            |                                  |                             |
| Ethylbenzene                              | 20.                                      | 10  | 300                  |             |            |                                  |                             |
| Carbon Tetrachloride                      | 0.5                                      | 0.25  | 0.5                  |             |            | [0.25]                           | 4.4                         |
| Chloroform                                | 12                                       | 5.7   |                      |             |            |                                  |                             |
| Dichlorobromomethane                      | 1.13                                     | 0.56  |                      |             |            | [0.56]                           | 46                          |
| Methyl Ethyl Ketone                       | 241                                      | 120   |                      |             |            |                                  |                             |
| Methyl Isobutyl Ketone                    | 241.                                     | 120   | 120*                 |             |            |                                  |                             |
| Methyl Tertiary Butyl Ether (MTBE)        | 26                                       | 13  | [13]                 |             |            |                                  |                             |
| Naphthalene                               | 20.                                      | 10  | 17*                  |             |            |                                  |                             |
| Tetrachloroethylene (PCE)                 | 1.6                                      | 0.8   | 5                    |             |            | [0.8]                            | 8.85                        |
| Trichloroethylene (TCE)                   | 5.4                                      | 2.7   | 5                    |             |            | [2.7]                            | 81                          |
| 1,1-Dichloroethane                        | 10.                                      | 5   | 5                    |             |            |                                  |                             |
| 1,1-Dichloroethylene                      | 0.115                                    | 0.057                                       | 6                    |             |            | [0.057]                          | 3.2                         |
| 1,2-Dichloroethylene (sum of Cis & Trans) | 20.                                      | 10  |                      |             |            |                                  |                             |
| 1,2-Dichloroethylene (cis)                | 12.                                      | 6   | [6]                  |             |            |                                  |                             |

**Table 5. Limitations Applicable to Discharges into Receiving Waters - Not Designated as MUN**

| Constituent                  | Current Limitations                            |   | Basis of Limitations |             |            |  |                                |
|------------------------------|--|---|----------------------|-------------|------------|--|--------------------------------|
|                              | Maximum Daily<br>Concentration<br>Limit (µg/L) | Average Monthly<br>Concentration<br>Limit, (µg/L) | MCL<br>(µg/L)        | CTR, (µg/L) |            |  |                                |
|                              |  |   |                      | Fresh Water | Salt water | Human Health<br>Water and<br>Organisms | Human Health<br>Organisms only |
| 1,2-Dichloroethylene (trans) | 20.  | 10  | <b>[10]</b>          |             |            |  |                                |
| 1,1,1-Trichloroethane (TCA)  | 10.  | 5   | 200                  |             |            |  |                                |
| Tert Butyl Alcohol (TBA)     | 24   | 12  | <b>[12]*</b>         |             |            |  |                                |
| 1,4-Dioxane                  | 6  | 3   | <b>3*</b>            |             |            |  |                                |
| Perchlorate                  | 8  | 4   | <b>6*</b>            |             |            |  |                                |
| 1,2,3-Trichloropropane (TCP) | 1.01   | 0.5   |                      |             |            |  |                                |

\*: Notification Level

Numbers in brackets and [BOLD] type in the Table are the basis of effluent limitations.

#### **F. Interim Effluent Limitations**

Participation in the Working Group and timely and effective implementation of the Regional Board-approved Work Plans will constitute interim, performance-based effluent limitations to implement the wasteload allocations in the selenium TMDL. Adhering to these interim effluent limitations satisfies the requirement, during the implementation period of each Work Plan, to achieve compliance with the TMDLs and wasteload allocations “as soon as possible.” Compliance with the final effluent limitations is required “as soon as possible” but no later than December 20, 2009 for selenium. Dischargers who elect not to participate in the Work Plan approach will be required to comply immediately with the final selenium effluent limitations or to implement a suitable offset program approved by the Executive Officer.

#### **G. Land Discharge Specifications – Not Applicable**

#### **H. Reclamation Specifications – Not Applicable**

### **VI. RATIONALE FOR RECEIVING WATER LIMITATIONS**

#### **A. Surface Water**

The surface water receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan and are a required part of this Order.

#### **B. Groundwater**

The receiving groundwater limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan.

### **VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Water Boards to require technical and monitoring reports. The MRP, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

The principal purposes of a monitoring program by a Discharger are to:

1. Document compliance with waste discharge requirements and prohibitions established by the Regional Water Board,
2. Facilitate self-policing by the Discharger in the prevention and abatement of pollution arising from waste discharge,

3. Develop or assist in the development of limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and to
4. Prepare water and wastewater quality inventories.

The MRP is a standard requirement in almost all NPDES permits issued by the Regional Water Board, including this Order. It contains definitions of terms, specifies general sampling and analytical protocols, and sets out requirements for reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations and the California Water Code.

Monitoring is the primary means of ensuring that waste discharge requirements are met. It is also the basis for enforcement actions against Dischargers who are in violation of the waste discharge requirements issued by the Regional Water Board. All Dischargers enrolled under this general permit will be required to conduct monitoring in accordance with a monitoring program issued by the Executive Officer. Each monitoring and reporting program will be customized for each enrollee based on the characteristics of the groundwater being treated and discharged. The typical required constituents and frequency of analyses are tabulated in the self-monitoring program attached to this general permit as "Attachment E." This monitoring and reporting program will be revised as appropriate. An increase of the parameters or frequency of monitoring will be required when monitoring data show the presence of petroleum hydrocarbons that are not limited in this Order, or toxicity test failures. A reduction of the parameters or frequency of monitoring may be implemented with prior approval of the Executive Officer when monitoring data demonstrate that such reduction is warranted. In accordance with the State Policy, for new Dischargers, this Order requires Dischargers applying for coverage under this general permit to monitor for the 17 congeners specified in the Policy, once during dry weather and once during wet weather for a one-year period. Existing Dischargers will not be required to monitor for the 17 congeners if monitoring for these substances have been conducted and nothing have been detected.

#### **A. Influent Monitoring**

Influent monitoring is required to determine the effectiveness of the treatment program and assess treatment plant performance.

#### **B. Effluent Monitoring**

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions and to allow ongoing characterization of discharges to determine potential adverse impacts and to determine continued suitability for coverage under the General Permit. Monitoring requirements are given in the proposed monitoring and reporting program (Attachment E). This provision requires compliance with the monitoring and reporting program, and is based on 40 CFR 122.44(i), 122.62, 122.63 and 124.5. The self monitoring program (SMP) is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general

sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board's policies. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

In addition to discharge rate, effluent is monitored for hardness, pH, total suspended and total dissolved solids, salinity, and turbidity. Monitoring is also required for certain metals and other priority, toxic pollutants which have water quality criteria established by the NTR and CTR, are determined to be present in the groundwater at a specific site location.

### **C. Whole Effluent Toxicity Testing Requirements**

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a shorter time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota.

This Order requires the Discharger to conduct acute toxicity testing of the effluent annually. This Order also requires the Discharger to conduct an Initial Investigation Toxicity Reduction Evaluation (IITRE) program when the acute toxicity test fails. Based on a review of monitoring data, there have been instances in which acute test failures can be attributed to salinity additions required to conduct the test. When this situation occurs, the Discharger normally performs additional acute testing of the effluent coupled with testing for all the priority pollutants. If the additional acute testing still fails and the priority pollutant scan shows no pollutants at levels of concern, acute testing is stopped and the acute test failure is presumed to be caused by ionic imbalance in the waste effluent (as described in relevant literature).

### **D. Receiving Water Monitoring - Not Applicable**

The MRP does not require characterization of receiving waters because most oftentimes treated discharges are to storm drains which are distant to receiving waters.

### **E. Other Monitoring Requirements - Not Applicable**

## **VIII. RATIONALE FOR PROVISIONS**

### **A. Standard Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in this Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

### **B. Special Provisions**

#### **1. Reopener Provisions**

This provision is based on 40 CFR Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, or adoption of new regulations by the State Board or Regional Water Board, including revisions to the Basin Plan.

#### **2. Special Studies and Additional Monitoring Requirements – Non NSMP Working Group**

- a. This Order requires the Discharger to provide a specific plan and schedule for the investigation and implementation of volume-reduction and other selenium, nitrogen and TDS Best Management Practices (BMPs), and to implement that plan upon approval by the Executive Officer.

#### **3. Best Management Practices and Pollution Prevention**

The provisions in the Order are based on requirements already specified in general Order No. R8-2004-0021.

#### **4. Construction, Operation, and Maintenance Specifications**

The provisions are based on requirements already specified in general Order No. R8-2007-0008, as a result of installing/constructing the necessary treatment systems required to comply with the general permit waste discharge requirements.

#### **5. Special Provisions for Municipal Facilities - Not Applicable**

#### **6. Other Special Provisions**

The other special provisions in the Order require the Discharger(s) to implement the nitrogen or selenium offset programs upon approval by the Executive Officer.

The other special provisions in the Order are based on requirements already specified in general Order No. R8-2004-0021. Some of the other special provisions are as follows:

##### Nitrogen and Selenium Management Program Working Group:

Certain of the Dischargers subject to Order No. R8-2004-0021 have formed a Nitrogen Selenium Management Program Working Group (NSMP WG) and have funded and are currently participating in a Work Plan. The major NSMP Work Plan tasks are listed below. As shown, these include the development of a nitrogen and/or selenium offset, trading or mitigation program that is to be based on a comprehensive understanding of the groundwater-related nutrient/selenium inputs to surface waters in the Newport Bay watershed. The Order includes the following:

- a. Prepare a detailed Work Plan based upon the commitments and concepts presented in this Order and implement that Work Plan upon approval by the Executive Officer;
- b. Manage the Work Plan with input from identified technical experts, relevant regulatory agencies and the public;
- c. Perform complementary monitoring and assessment of nutrient and selenium sources in the watershed, utilizing, in part, ongoing studies performed by others;
- d. Evaluate nutrient TMDL nutrient load reduction targets, focusing especially on groundwater-related sources, loadings and reductions; and
- e. Develop a nutrient offset, trading or mitigation program based upon the outcome of other Work Plan elements.
- f. Identify and assess selenium treatment technologies, including potential future technologies;
- g. Identify and assess selenium Best Management Practices (BMPs) (including volume-reduction techniques)(task includes a “Quick Start” program for certain BMP assessments);
- h. Facilitate demonstration testing of identified selenium treatment technologies and BMPs;

- i. Develop and implement upon Executive Officer approval a selenium offset, trading or mitigation program based upon the outcome of complementary monitoring, treatment technology and BMP-related Work Plan elements; and
- j. Develop a selenium site-specific objective for the Newport Bay/San Diego Creek watershed if appropriate based upon outcome of other Work Plan elements.

Completion of the approved Work Plan is expected to result in the development of a comprehensive understanding of and management plan for nitrogen and selenium in groundwater-related inflows to surface waters in the Newport Bay watershed and as such, goes beyond issues specific to the discharges regulated under this Order. The management plans are expected to provide recommendations for specific load and wasteload allocations for the groundwater-related components of the “undefined source” category identified in the TMDLs, in addition to offset, trading or mitigation program recommendations. Revisions to the TMDLs and/or to the requirements in this Order may be necessary based on the results of the Work Plan assessments and resultant management plans.

When and if the Working Group has identified the selenium treatment technology (-ies) appropriate for these types of discharge, this Order may be reopened to include applicable technology-based effluent limitations, as appropriate.

This Order also recognizes that the Nitrogen Selenium Management Program Working Group is investigating selenium treatment and control technologies. This Order requires that if a practicable selenium treatment technology becomes available, the Discharger shall implement that technology and comply with the final selenium limits in this Order within one year of notification of the need to do so by the Regional Water Board, but in no case later than December 20, 2009.

## **7. Compliance Schedules**

The compliance schedule provisions in the Order are based on requirements already specified in general Order No. R8-2004-0021.

## **IX. PUBLIC PARTICIPATION**

The California Regional Water Quality Control Board, Santa Ana Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) general permit for discharges to surface waters of extracted and treated groundwater resulting from groundwater dewatering operations and/or groundwater cleanup activities at sites within the San Diego Creek/Newport Bay watershed polluted by petroleum hydrocarbons, solvents, metals and/or salts. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.



## **A. Notification of Interested Parties**

The Regional Water Board has notified the Dischargers and interested agencies and persons of its intent to prescribe waste discharge requirements in this General Permit and provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the posting of Notice of Public at the Regional Water Board website: <http://www.waterboards.ca.gov/santaana>, on October 31, 2007 and publication in the Orange County Register for one day.

## **B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on November 9, 2007 to:

Jane Qiu  
California Regional Water Quality Control Board  
Santa Ana Region  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

## **C. Public Hearing**

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: November 30, 2007  
Time: 9:00 A.M.  
Location: Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address <http://www.waterboards.ca.gov/santaana> where you can access the current agenda for changes in dates and locations.

#### **D. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

#### **E. Information and Copying**

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 9:00 a.m. and 3:00 p.m. Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (951) 782-41308.

#### **F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

#### **G. Additional Information**

Requests for additional information or questions regarding this Order should be directed to Jane Qiu at (951) 320-2008.

## ATTACHMENT G - EPA PRIORITY POLLUTANT LIST

| EPA PRIORITY POLLUTANT LIST                  |                                   |  |
|--|-----------------------------------|--|
| Metals                                       | Acid Extractibles                 | Base/Neutral Extractibles (continuation) |
| 1. Antimony                                  | 45. 2-Chlorophenol                | 91. Hexachloroethane                     |
| 2. Arsenic                                   | 46. 2,4-Dichlorophenol            | 92. Indeno (1,2,3-cd) Pyrene             |
| 3. Beryllium                                 | 47. 2,4-Dimethylphenol            | 93. Isophorone                           |
| 4. Cadmium                                   | 48. 2-Methyl-4,6-Dinitrophenol    | 94. Naphthalene                          |
| 5a. Chromium (III)                           | 49. 2,4-Dinitrophenol             | 95. Nitrobenzene                         |
| 5b. Chromium (VI)                            | 50. 2-Nitrophenol                 | 96. N-Nitrosodimethylamine               |
| 6. Copper                                    | 51. 4-Nitrophenol                 | 97. N-Nitrosodi-N-Propylamine            |
| 7. Lead                                      | 52. 3-Methyl-4-Chlorophenol       | 98. N-Nitrosodiphenylamine               |
| 8. Mercury                                   | 53. Pentachlorophenol             | 99. Phenanthrene                         |
| 9. Nickel                                    | 54. Phenol                        | 100. Pyrene                              |
| 10. Selenium                                 | 55. 2, 4, 6 – Trichlorophenol     | 101. 1,2,4-Trichlorobenzene              |
| 11. Silver                                   | Base/Neutral Extractibles         | Pesticides                               |
| 12. Thallium                                 | 56. Acenaphthene                  | 102. Aldrin                              |
| 13. Zinc                                     | 57. Acenaphthylene                | 103. Alpha BHC                           |
|  | 58. Anthracene                    | 104. Beta BHC                            |
|  | 59. Benzidine                     | 105. Delta BHC                           |
| Miscellaneous                                | 60. Benzo (a) Anthracene          | 106. Gamma BHC                           |
| 14. Cyanide                                  | 61. Benzo (a) Pyrene              | 107. Chlordane                           |
| 15. Asbestos (not required unless requested) | 62. Benzo (b) Fluoranthene        | 108. 4, 4' - DDT                         |
|  | 63. Benzo (g,h,i) Perylene        | 109. 4, 4' - DDE                         |
| Volatile Organics                            | 64. Benzo (k) Fluoranthene        | 110. 4, 4' - DDD                         |
| 17. Acrolein                                 | 65. Bis (2-Chloroethoxy) Methane  | 111. Dieldrin                            |
| 18. Acrylonitrile                            | 66. Bis (2-Chloroethyl) Ether     | 112. Alpha Endosulfan                    |
| 19. Benzene                                  | 67. Bis (2-Chloroisopropyl) Ether | 113. Beta Endosulfan                     |
| 20. Bromoform                                | 68. Bis (2-Ethylhexyl) Phthalate  | 114. Endosulfan Sulfate                  |
| 21. Carbon Tetrachloride                     | 69. 4-Bromophenyl Phenyl Ether    | 115. Endrin                              |
| 22. Chlorobenzene                            | 70. Butylbenzyl Phthalate         | 116. Endrin Aldehyde                     |
| 23. Chlorodibromomethane                     | 71. 2-Chloronaphthalene           | 117. Heptachlor                          |
| 24. Chloroethane                             | 72. 4-Chlorophenyl Phenyl Ether   | 118. Heptachlor Epoxide                  |
| 25. 2-Chloroethyl Vinyl Ether                | 73. Chrysene                      | 119. PCB 1016                            |
| 26. Chloroform                               | 74. Dibenzo (a,h) Anthracene      | 120. PCB 1221                            |
| 27. Dichlorobromomethane                     | 75. 1,2-Dichlorobenzene           | 121. PCB 1232                            |
| 28. 1,1-Dichloroethane                       | 76. 1,3-Dichlorobenzene           | 122. PCB 1242                            |
| 29. 1,2-Dichloroethane                       | 77. 1,4-Dichlorobenzene           | 123. PCB 1248                            |
| 30. 1,1-Dichloroethylene                     | 78. 3,3'-Dichlorobenzidine        | 124. PCB 1254                            |
| 31. 1,2-Dichloropropane                      | 79. Diethyl Phthalate             | 125. PCB 1260                            |
| 32. 1,3-Dichloropropylene                    | 80. Dimethyl Phthalate            | 126. Toxaphene                           |
| 33. Ethylbenzene                             | 81. Di-n-Butyl Phthalate          |  |
| 34. Methyl Bromide                           | 82. 2,4-Dinitrotoluene            |  |
| 35. Methyl Chloride                          | 83. 2,6-Dinitrotoluene            |  |
| 36. Methylene Chloride                       | 84. Di-n-Octyl Phthalate          |  |
| 37. 1,1,2,2-Tetrachloroethane                | 85. 1,2-Diphenylhydrazine         |  |
| 38. Tetrachloroethylene                      | 86. Fluoranthene                  |  |
| 39. Toluene                                  | 87. Fluorene                      |  |
| 40. 1,2-Trans-Dichloroethylene               | 88. Hexachlorobenzene             |  |
| 41. 1,1,1-Trichloroethane                    | 89. Hexachlorobutadiene           |  |
| 42. 1,1,2-Trichloroethane                    | 90. Hexachlorocyclopentadiene     |  |
| 43. Trichloroethylene                        |                                   |  |
| 44. Vinyl Chloride                           |                                   |  |

## ATTACHMENT H – MINIMUM LEVELS

### MINIMUM LEVELS IN PPB (µg/l)

| Table 1- VOLATILE SUBSTANCES <sup>1</sup>     | GC  | GCMS |
|---|-----|------|
| Acrolein                                      | 2.0 | 5    |
| Acrylonitrile                                 | 2.0 | 2    |
| Benzene                                       | 0.5 | 2    |
| Bromoform                                     | 0.5 | 2    |
| Carbon Tetrachloride                          | 0.5 | 2    |
| Chlorobenzene                                 | 0.5 | 2    |
| Chlorodibromomethane                          | 0.5 | 2    |
| Chloroethane                                  | 0.5 | 2    |
| Chloroform                                    | 0.5 | 2    |
| Dichlorobromomethane                          | 0.5 | 2    |
| 1,1 Dichloroethane                            | 0.5 | 1    |
| 1,2 Dichloroethane                            | 0.5 | 2    |
| 1,1 Dichloroethylene                          | 0.5 | 2    |
| 1,2 Dichloropropane                           | 0.5 | 1    |
| 1,3 Dichloropropylene (volatile)              | 0.5 | 2    |
| Ethylbenzene                                  | 0.5 | 2    |
| Methyl Bromide ( <i>Bromomethane</i> )        | 1.0 | 2    |
| Methyl Chloride ( <i>Chloromethane</i> )      | 0.5 | 2    |
| Methylene Chloride ( <i>Dichloromethane</i> ) | 0.5 | 2    |
| 1,1,2,2 Tetrachloroethane                     | 0.5 | 1    |
| Tetrachloroethylene                           | 0.5 | 2    |
| Toluene                                       | 0.5 | 2    |
| trans-1,2 Dichloroethylene                    | 0.5 | 1    |
| 1,1,1 Trichloroethane                         | 0.5 | 2    |
| 1,1,2 Trichloroethane                         | 0.5 | 2    |
| Trichloroethylene                             | 0.5 | 2    |
| Vinyl Chloride                                | 0.5 | 2    |
| 1,2 Dichlorobenzene (volatile)                | 0.5 | 2    |
| 1,3 Dichlorobenzene (volatile)                | 0.5 | 2    |
| 1,4 Dichlorobenzene (volatile)                | 0.5 | 2    |

### Selection and Use of Appropriate ML Value:

**ML Selection:** When there is more than one ML value for a given substance, the discharger may select any one of those ML values, and their associated analytical methods, listed in this Attachment that are below the calculated effluent limitation for compliance determination. If no ML value is below the effluent limitation, then the discharger shall select the lowest ML value, and its associated analytical method, listed in the PQL Table.

**ML Usage:** The ML value in this Attachment represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. Assuming that all method-specific analytical steps are followed, the ML value will also represent, after the appropriate application of method-specific factors, the lowest standard in the calibration curve for that specific analytical technique. Common analytical practices sometimes require different treatment of the sample relative to calibration standards.

**Note:** chemical names in parenthesis and italicized is another name for the constituent.

<sup>1</sup> The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

**MINIMUM LEVELS IN PPB (µg/l)**

| <b>Table 2 – Semi-Volatile Substances<sup>2</sup></b> | <b>GC</b> | <b>GCMS</b> | <b>LC</b> |
|---|-----------|-------------|-----------|
| 2-Chloroethyl vinyl ether                             | 1         | 1           |           |
| 2 Chlorophenol  | 2         | 5           |           |
| 2,4 Dichlorophenol                                    | 1         | 5           |           |
| 2,4 Dimethylphenol                                    | 1         | 2           |           |
| 4,6 Dinitro-2-methylphenol                            | 10        | 5           |           |
| 2,4 Dinitrophenol                                     | 5         | 5           |           |
| 2- Nitrophenol  |           | 10          |           |
| 4- Nitrophenol  | 5         | 10          |           |
| 4 Chloro-3-methylphenol                               | 5         | 1           |           |
| 2,4,6 Trichlorophenol                                 | 10        | 10          |           |
| Acenaphthene  | 1         | 1           | 0.5       |
| Acenaphthylene  |           | 10          | 0.2       |
| Anthracene  |           | 10          | 2         |
| Benzidine   |           | 5           |           |
| Benzo (a) Anthracene (1,2 Benzanthracene)             | 10        | 5           |           |
| Benzo(a) pyrene (3,4 Benzopyrene)                     |           | 10          | 2         |
| Benzo (b) Fluoranthene (3,4 Benzofluoranthene)        |           | 10          | 10        |
| Benzo(g,h,i)perylene                                  |           | 5           | 0.1       |
| Benzo(k)fluoranthene                                  |           | 10          | 2         |
| bis 2-(1-Chloroethoxyl) methane                       |           | 5           |           |
| bis(2-chloroethyl) ether                              | 10        | 1           |           |
| bis(2-Chloroisopropyl) ether                          | 10        | 2           |           |
| bis(2-Ethylhexyl) phthalate                           | 10        | 5           |           |
| 4-Bromophenyl phenyl ether                            | 10        | 5           |           |
| Butyl benzyl phthalate                                | 10        | 10          |           |
| 2-Chloronaphthalene                                   |           | 10          |           |
| 4-Chlorophenyl phenyl ether                           |           | 5           |           |
| Chrysene  |           | 10          | 5         |
| Dibenzo(a,h)-anthracene                               |           | 10          | 0.1       |
| 1,2 Dichlorobenzene (semivolatile)                    | 2         | 2           |           |
| 1,3 Dichlorobenzene (semivolatile)                    | 2         | 1           |           |
| 1,4 Dichlorobenzene (semivolatile)                    | 2         | 1           |           |
| 3,3' Dichlorobenzidine                                |           | 5           |           |
| Diethyl phthalate                                     | 10        | 2           |           |
| Dimethyl phthalate                                    | 10        | 2           |           |
| di-n-Butyl phthalate                                  |           | 10          |           |
| 2,4 Dinitrotoluene                                    | 10        | 5           |           |
| 2,6 Dinitrotoluene                                    |           | 5           |           |
| di-n-Octyl phthalate                                  |           | 10          |           |
| 1,2 Diphenylhydrazine                                 |           | 1           |           |
| Fluoranthene  | 10        | 1           | 0.05      |
| Fluorene  |           | 10          | 0.1       |
| Hexachloro-cyclopentadiene                            | 5         | 5           |           |
| 1,2,4 Trichlorobenzene                                | 1         | 5           |           |

## MINIMUM LEVELS IN PPB (µg/l)

| <b>Table 2 - SEMI-VOLATILE SUBSTANCES<sup>2</sup></b> | <b>GC</b> | <b>GCMS</b> | <b>LC</b> | <b>COLOR</b> |
|---|-----------|-------------|-----------|--------------|
| Pentachlorophenol                                     | 1         | 5           |           |              |
| Phenol <sup>3</sup>                                   | 1         | 1           |           | 50           |
| Hexachlorobenzene                                     | 5         | 1           |           |              |
| Hexachlorobutadiene                                   | 5         | 1           |           |              |
| Hexachloroethane                                      | 5         | 1           |           |              |
| Indeno(1,2,3,cd)-pyrene                               |           | 10          | 0.05      |              |
| Isophorone  | 10        | 1           |           |              |
| Naphthalene   | 10        | 1           | 0.2       |              |
| Nitrobenzene  | 10        | 1           |           |              |
| N-Nitroso-dimethyl amine                              | 10        | 5           |           |              |
| N-Nitroso-di n-propyl amine                           | 10        | 5           |           |              |
| N-Nitroso diphenyl amine                              | 10        | 1           |           |              |
| Phenanthrene  |           | 5           | 0.05      |              |
| Pyrene  |           | 10          | 0.05      |              |

| <b>Table 3–<br/>INORGANICS<sup>4</sup></b> | <b>FAA</b> | <b>GFA<br/>A</b> | <b>IC<br/>P</b> | <b>ICPMS</b> | <b>SPGFA<br/>A</b> | <b>HYDRID<br/>E</b> | <b>CVAA</b> | <b>COLO<br/>R</b> | <b>DCP</b> |
|--|------------|------------------|-----------------|--------------|--------------------|---------------------|-------------|-------------------|------------|
| Antimony                                   | 10         | 5                | 50              | 0.5          | 5                  | 0.5                 |             |                   | 1000       |
| Arsenic                                    |            | 2                | 10              | 2            | 2                  | 1                   |             | 20                | 1000       |
| Beryllium                                  | 20         | 0.5              | 2               | 0.5          | 1                  |                     |             |                   | 1000       |
| Cadmium                                    | 10         | 0.5              | 10              | 0.25         | 0.5                |                     |             |                   | 1000       |
| Chromium (total)                           | 50         | 2                | 10              | 0.5          | 1                  |                     |             |                   | 1000       |
| Chromium VI                                | 5          |                  |                 |              |                    |                     |             | 10                |            |
| Copper                                     | 25         | 5                | 10              | 0.5          | 2                  |                     |             |                   | 1000       |
| Lead                                       | 20         | 5                | 5               | 0.5          | 2                  |                     |             |                   | 10000      |
| Mercury                                    |            |                  |                 | 0.5          |                    |                     | 0.2         |                   |            |
| Nickel                                     | 50         | 5                | 20              | 1            | 5                  |                     |             |                   | 1000       |
| Selenium                                   |            | 5                | 10              | 2            | 5                  | 1                   |             |                   | 1000       |
| Silver                                     | 10         | 1                | 10              | 0.25         | 2                  |                     |             |                   | 1000       |
| Thallium                                   | 10         | 2                | 10              | 1            | 5                  |                     |             |                   | 1000       |
| Zinc                                       | 20         |                  | 20              | 1            | 10                 |                     |             |                   | 1000       |
| Cyanide                                    |            |                  |                 |              |                    |                     |             | 5                 |            |

<sup>2</sup> With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standards concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.

<sup>3</sup> Phenol by colorimetric technique has a factor of 1.

<sup>4</sup> The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

**MINIMUM LEVELS IN PPB (µg/l)**

| <b>Table 4- PESTICIDES – PCBs<sup>5</sup></b>                  | <b>GC</b> |
|--|-----------|
| Aldrin   | 0.005     |
| alpha-BHC ( <i>a</i> -Hexachloro-cyclohexane)                  | 0.01      |
| beta-BHC ( <i>b</i> -Hexachloro-cyclohexane)                   | 0.005     |
| Gamma-BHC ( <i>Lindane</i> ; <i>g</i> -Hexachloro-cyclohexane) | 0.02      |
| Delta-BHC ( <i>d</i> -Hexachloro-cyclohexane)                  | 0.005     |
| Chlordane  | 0.1       |
| 4,4'-DDT   | 0.01      |
| 4,4'-DDE   | 0.05      |
| 4,4'-DDD   | 0.05      |
| Dieldrin   | 0.01      |
| Alpha-Endosulfan   | 0.02      |
| Beta-Endosulfan  | 0.01      |
| Endosulfan Sulfate   | 0.05      |
| Endrin   | 0.01      |
| Endrin Aldehyde  | 0.01      |
| Heptachlor   | 0.01      |
| Heptachlor Epoxide   | 0.01      |
| PCB 1016   | 0.5       |
| PCB 1221   | 0.5       |
| PCB 1232   | 0.5       |
| PCB 1242   | 0.5       |
| PCB 1248   | 0.5       |
| PCB 1254   | 0.5       |
| PCB 1260   | 0.5       |
| Toxaphene  | 0.5       |

Techniques:

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR - Colorimetric

<sup>5</sup> The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

## ATTACHMENT I – TRIGGERS FOR MONITORING PRIORITY POLLUTANTS

|           | Constituent               | µg/L        |
|-----------|---------------------------|-------------|
| 1         | Antimony                  | 7           |
| 2         | Arsenic                   | 75          |
| 3         | Beryllium                 | --          |
| 4         | Cadmium                   | 1.9         |
| 5a        | Chromium III              | 183         |
| 5b        | Chromium VI               | 5.7         |
| 6         | Copper                    | 8.1         |
| 7         | Lead                      |             |
| 8         | Mercury                   | 0.026       |
| 9         | Nickel                    | 47          |
| 10        | Selenium                  | 2.5         |
| 11        | Silver                    | 6.7         |
| 12        | Thallium                  | 0.85        |
| 13        | Zinc                      | 108         |
| 14        | Cyanide                   | 2.6         |
| 15        | Asbestos                  | --          |
| 16        | 2,3,7,8-TCDD (Dioxin)     | 0.000000007 |
| 17        | Acrolein                  | 160         |
| 18        | Acrylonitrile             | 0.03        |
| 19        | Benzene                   | 0.6         |
| 20        | Bromoform                 | 2.2         |
| 21        | Carbon Tetrachloride      | 0.13        |
| 22        | Chlorobenzene             | 340         |
| 23        | Chlorodibromomethane      | 0.22        |
| 24        | Chloroethane              | --          |
| 25        | 2-Chloroethyl vinyl ether | --          |
| 26        | Chloroform                | --          |
| 27        | Dichlorobromomethane      | 0.28        |
| <b>28</b> | <b>1,1-Dichloroethane</b> | <b>5</b>    |
| 29        | 1,2-Dichloroethane        | 0.19        |
| 30        | 1,1-Dichloroethylene      | 0.029       |
| 31        | 1,2-Dichloropropane       | 0.26        |
| 32        | 1,3-Dichloropropylene     | 5           |
| <b>33</b> | <b>Ethylbenzene</b>       | <b>0.3</b>  |
| 34        | Methyl Bromide            | 24          |
| 35        | Methyl Chloride           | --          |
| 36        | Methylene Chloride        | 2.4         |
| 37        | 1,1,2,2-Tetrachloroethane | 0.085       |

|           | Constituent                       | µg/L        |
|-----------|-----------------------------------|-------------|
| 38        | Tetrachloroethylene               | 0.4         |
| <b>39</b> | <b>Toluene</b>                    | <b>0.15</b> |
| <b>40</b> | <b>1,2-Trans-dichloroethylene</b> | <b>10</b>   |
| <b>41</b> | <b>1,1,1-Trichloroethane</b>      | <b>200</b>  |
| 42        | 1,1,2-Trichloroethane             | 0.3         |
| 43        | Trichloroethylene                 | 1.35        |
| 44        | Vinyl Chloride                    | <b>0.5</b>  |
| 45        | 2-Chlorophenol                    | 60          |
| 46        | 2,4-Dichlorophenol                | 46.5        |
| 47        | 2,4-Dimethylphenol                | 270         |
| 48        | 2-Methy-4,6-Dinitrophenol         | 6.7         |
| 49        | 2,4-Dinitrophenol                 | 35          |
| 50        | 2-Nitrophenol                     | --          |
| 51        | 4-Nitrophenol                     | --          |
| 52        | 3-Methyl-4-Chlorophenol           | --          |
| 53        | Pentachlorophenol                 | 0.14        |
| 54        | Phenol                            | 10500       |
| 55        | 2,4,6-Trichlorophenol             | 1.05        |
| 56        | Acenaphthene                      | 600         |
| 57        | Acenaphthylene                    | --          |
| 58        | Anthracene                        | 4800        |
| 59        | Benzidine                         | 0.00006     |
| 60        | Benzo (a) anthracene              | 0.0022      |
| 61        | Benzo (a) pyrene                  | 0.0022      |
| 62        | Benzo (b) fluoranthene            | 0.0022      |
| 63        | Benzo (g,h,i) pyrene              | --          |
| 64        | Benzo (k) fluorantene             | 0.0022      |
| 65        | Bis (2-Chloroethoxy) methane      | --          |
| 66        | Bis (2-Chloroethyl) ether         | 0.016       |
| 67        | Bis (2-Chloroisopropyl) ether     | 700         |
| 68        | Bis (2-ethyhexyl) phthalate       | 0.9         |
| 69        | 4-Bromophenyl phenyl ether        | --          |
| 70        | Butyl benzyl phthalate            | 1500        |
| 71        | 2- Chloronaphthalene              | 850         |
| 72        | 4-Chlorophenyl phenyl ether       | --          |
| 73        | Chrysene                          | 0.0022      |
| 74        | Dibenzo (a,h) anthracene          | 0.0022      |
| <b>75</b> | <b>1,2-Dichlorobenzene</b>        | <b>0.6</b>  |

See notes below.



**ATTACHMENT I. -Continued**

|           | CONSTITUENT                             | µg/L             |
|-----------|---|------------------|
| 76        | 1,3-Dichlorobenzene                     | 200              |
| <b>77</b> | <b><i>1,4-Dichlorobenzene</i></b>       | <b><i>5</i></b>  |
| 78        | 3,3-Dichlorobenzidine                   | 0.02             |
| 79        | Diethyl phthalate                       | 11,500           |
| 80        | Dimethyl phthalate                      | 156,500          |
| 81        | Di-N-butyl phthalate                    | 1,350            |
| 82        | 2,4-Dinitrotoluene                      | 0.055            |
| 83        | 2,6-Dinitrotoluene                      | --               |
| 84        | Di-N-octyl phthalate                    | --               |
| 85        | 1,2-Diphenylhydrazine                   | 0.02             |
| 86        | Fluoranthene                            | 150              |
| 87        | Fluorene                                | 650              |
| 88        | Hexachlorobenzene                       | 0.00038          |
| 89        | Hexachlorobutadiene                     | 0.22             |
| <b>90</b> | <b><i>Hexachlorocyclopentadiene</i></b> | <b><i>50</i></b> |
| 91        | Hexachloroethane                        | 0.95             |
| 92        | Indeno (1,2,3-cd) pyrene                | 0.0022           |
| 93        | Isophorone                              | 4.2              |
| <b>94</b> | <b><i>Naphthalene</i></b>               | <b><i>17</i></b> |
| 95        | Nitrobenzene                            | 8.5              |
| 96        | N-Nitrosodimethylamine                  | 0.00035          |
| 97        | N-Nitrosodi-N-propylamine               | 0.0025           |
| 98        | N-Nitrosodiphenylamine                  | 2.5              |
| 99        | Phenanthrene                            | --               |

|            | CONSTITUENT                           | µg/L            |
|------------|---------------------------------------|-----------------|
| 100        | Pyrene                                | 480             |
| <b>101</b> | <b><i>1,2,4 -Trichlorobenzene</i></b> | <b><i>5</i></b> |
| 102        | Aldrin                                | 0.00007         |
| 103        | BHC Alpha                             | 0.0020          |
| 104        | BHC Beta                              | 0.007           |
| 105        | BHC Gamma                             | 0.010           |
| 106        | BHC Delta                             | --              |
| 107        | Chlordane                             | 0.00029         |
| 108        | 4,4-DDT                               | 0.0003          |
| 109        | 4,4-DDE                               | 0.0003          |
| 110        | 4,4-DDD                               | 0.00042         |
| 111        | Dieldrin                              | 0.00007         |
| 112        | Endosulfan Alpha                      | 0.028           |
| 113        | Endosulfan Beta                       | 0.028           |
| 114        | Endosulfan Sulfate                    | 55              |
| 115        | Endrin                                | 0.018           |
| 116        | Endrin Aldehyde                       | 0.38            |
| 117        | Heptachlor                            | 0.00011         |
| 118        | Heptachlor Epoxide                    | 0.00005         |
| 119        | PCB 1016                              | 0.000085        |
| 120        | PCB 1221                              | 0.000085        |
| 125        | PCB 1260                              | 0.000085        |
| 126        | Toxaphene                             | 0.00038         |

**Notes:**

1. For constituents not shown italicized, the values shown in the Table are fifty percent of the most stringent applicable receiving water objectives (freshwater or human health (consumption of water and organisms) as specified for that pollutant in 40 CFR 131.38<sup>6</sup>).
2. For constituents shown bold and italicized, the values shown in the Table are based on the California Department of Health Services maximum contaminant levels (MCLs) or Notification Level. Notification Level based trigger is underlined.
3. For hardness dependent metals, the hardness value used is 200 mg/L and for pentachlorophenol, the pH value used is 7.5 standard units.

<sup>6</sup> See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.

California Regional Water Quality Control Board  
Santa Ana Region

July 20, 2009

STAFF REPORT

**ITEM: \*9**

**SUBJECT:** Amendment of Order No. R8-2007-0041, NPDES No. CAG918002, general discharge permit for discharges to surface waters of groundwater resulting from groundwater dewatering operations and/or groundwater cleanup activities at sites within the San Diego Creek/Newport Bay Watershed polluted by petroleum hydrocarbons, solvents, metals and/or salts - Order No. R8-2009-0045

**DISCUSSION:**

On November 30, 2007, the Regional Water Board adopted Order No. R8-2007-0041, NPDES No. CAG918002, prescribing general waste discharge requirements for discharges to surface waters of groundwater resulting from groundwater dewatering operations and/or groundwater cleanup activities at sites within the San Diego Creek/Newport Bay watershed polluted by petroleum hydrocarbons, solvents, metals and/or salts.

Order No. R8-2007-0041 consolidated the requirements of two general permits for discharges within the San Diego Creek/Newport Bay watershed: Order No. R8-2007-0008, NPDES No. CAG918001 (General Groundwater Cleanup Permit for Discharges to Surface Waters of Extracted and Treated Groundwater Resulting from the Cleanup of Groundwater Polluted by Petroleum Hydrocarbons, Solvents, Metals and/or Salts), and Order No. R8-2004-0021, NPDES No. CAG998001 (General Waste Discharge Requirements for Short-term Groundwater-Related Discharges and De Minimus Wastewater Discharges to Surface Waters within the San Diego Creek/Newport Bay Watershed). Specifically, Order No. 2007-0041 includes requirements to regulate groundwater-related discharges that may contain selenium, nutrients, volatile organic compounds, solvents or metals. The intent of this Order was to expedite the processing of applications and permitting for projects for which authorization under both Order No. 2007-0008 and Order No. R8-2004-0021 would otherwise have been necessary.

Order No. R8-2004-0021, NPDES No. CAG998002, regulates short-term groundwater-related discharges that are expected to last one year or less, and discharges that pose an insignificant threat to water quality (*de minimus* discharges) within the San Diego Creek/ Newport Bay watershed. This Order was amended by Order No. R8-2006-0065 to allow the discharge of wastewater effluent associated with pilot testing of selenium and nitrogen treatment technologies and BMPs and to prohibit the discharge of brine, resins, sludge or other secondary concentrates from treatment systems to surface waters. In summary, Order No. R8-2004-0021, as amended by Order No. R8-2006-0065, regulates the following types of discharges in the watershed:

- a. Short-term (one year or less duration) discharges from activities involving groundwater extraction and discharge:
  - (1) Wastes associated with well installation, development, test pumping and purging;
  - (2) Aquifer testing wastes;
  - (3) Dewatering wastes from subterranean seepage; and
  - (4) Groundwater dewatering wastes at construction sites.
- b. Discharges that pose an insignificant threat to water quality:
  - (1) Construction dewatering wastes not involving groundwater (except storm water dewatering at construction sites)<sup>1</sup>;
  - (2) Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
  - (3) Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
  - (4) Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
  - (5) Discharges from potable water supply systems resulting from system failures, pressure releases, etc.;
  - (6) Discharges from fire hydrant testing or flushing;
  - (7) Non-contact cooling water;
  - (8) Air conditioning condensate;
  - (9) Swimming pool drainage;
  - (10) Discharges resulting from diverted stream flows;
  - (11) Discharges from residential sump pumps; and
  - (12) Other similar types of wastes, which pose a *de minimus* threat to water quality, yet technically must be regulated under waste discharge requirements.
- c. Wastewater effluent associated with testing of selenium and nitrogen treatment technologies and BMPs.

In the process of consolidation of the requirements of Order No. R8-2004-0021, as amended by Order No. R8-2006-0065, into Order No. R8-2007-0041, certain types of discharges were inadvertently omitted. Specifically, Order No. R8-2007-0041 failed to include Items b. and c. of the above listing (i.e., *de minimus* types of discharges and wastewater associated with testing of selenium and nitrogen treatment technologies and BMPs). Order No. R8-2004-0021 is due to expire on December 20, 2009 and is not planned to be renewed since regulatory coverage can and will be provided under Order No. R8-2007-0041. However, it is necessary to amend Order No. R8-2007-0041 to include the discharges identified in items b. and c. above, as well as the discharge prohibition added by Order No. R8-2006-0065.

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<sup>1</sup> Storm water discharges are covered under separate permit.

Furthermore, based on input from some of the Dischargers, it is necessary to clarify in Order No. R8-2007-0041, that for certain metals (including lead, cadmium, copper, chromium (II), nickel, silver, and zinc), the toxicity of which is hardness-dependent, the fifth percentile hardness value to be used in calculating the applicable criteria/effluent limits cannot exceed 400 mg/L, unless a site specific water effect ratio (WER) is developed and approved by the Regional Water Board. The California Toxic Rule, which specifies numeric criteria for these metals using equations in which hardness is a variable, explains that if the hardness is over 400 mg/L, two options are available to calculate the freshwater metals criteria: (1) Calculate the criterion using a default WER of 1.0 and using a hardness of 400 mg/L in the hardness equation; or (2) calculate the criterion using a WER and the actual ambient hardness of the surface water in the equation.

The following are the recommended changes to Order No. R8-2007-0041. Deleted text is struck out and added text is bold and highlighted.

1. Order No. R8-2007-0041, page 4, modify last paragraph of Section I. Discharge Information as follows:

This general permit will regulate **de minimus discharges and wastewater effluent associated with testing of selenium and nitrogen treatment technologies and BMPs, and** discharges of treated wastewater from groundwater dewatering and/or groundwater remediation activities at sites polluted by petroleum hydrocarbons, solvents, metals and/or salts within the San Diego Creek/Newport Bay watershed.

2. Order No. R8-2007-0041, page 6, modify paragraph 5., as follows:

5. The Discharger shall submit for approval by the Executive Officer of the Regional Water Board a fixed hardness value based on the 5th percentile of effluent hardness measurements or the average ambient receiving water hardness measurements for those sites polluted with metals (lead, cadmium, copper, chromium (III), nickel, silver, and zinc). **For purposes of calculating the applicable fresh water aquatic life criteria and effluent limitations for metals, the required fifth percentile hardness value has an upper limit of 400 mg/L as calcium carbonate, unless a site specific water effect ratio (WER) is developed and approved by the Regional Water Board. The California Toxic Rule explains that if the hardness is over 400 mg/L, two options are available to calculate the freshwater metals criteria (which are used as the basis for setting effluent limitations): (1) Calculate the criterion using a default WER of 1.0 and using a hardness of 400 mg/L in the hardness equation; or (2) calculate the criterion using a WER and the actual ambient hardness of the surface water in the equation.**

3. Order No. R8-2007-0041, page 8, modify paragraph II.B.3., as follows:

3. For freshwater discharges, within forty five (45) days of the effective date of this Order, Dischargers from those sites polluted with leaded gasoline or metals shall submit for approval by the Regional Water Board Executive Officer the proposed hardness value based on 5th percentile of effluent hardness measurements or the average ambient freshwater receiving water hardness measurements. Once approved by the Executive Officer, this hardness value shall be the basis for determining the lead/metals effluent limits for the discharge from Attachment "BJ" of this Order.

4. Order No. R8-2007-0041, page 10, modify last paragraph of Finding B., as follows:

In summary, this general permit will regulate discharges from activities involving groundwater dewatering, **discharges that pose an insignificant threat to water quality, wastewater effluent associated with testing of selenium and nitrogen treatment technologies and BMPs** and groundwater remediation in areas where contamination from petroleum hydrocarbons, solvents, metals and/or salts may be present. These activities include the following:

1. Wastes associated with well installation, development, test pumping and purging;
2. Aquifer testing wastes;
3. Dewatering wastes from subterranean seepage;
4. Groundwater dewatering wastes at construction sites; and
5. Groundwater remediation.
6. **Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;**
7. **Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;**
8. **Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;**
9. **Discharges from potable water supply systems resulting from initial system startup, routine startup, sampling of influent flow, system failures, pressure releases, etc.;**
10. **Discharges from fire hydrant testing or flushing;**
11. **Air conditioning condensate;**
12. **Swimming pool discharge;**
13. **Discharges resulting from diverted stream flows;**
14. **Decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities;**
15. **Discharges of wastewater effluent associated with testing of selenium and nitrogen treatment technologies and BMPs into surface water; and**
16. **Other similar types of wastes as determined by the Regional Water Board Executive Officer, which pose a de minimus threat to water quality yet must be regulated under waste discharge requirements.**

5. Order No. R8-2007-0041, page 17, add new paragraph G. in Section IV., as follows:

**G. The discharge of brine, resins, sludge or other secondary concentrates from treatment systems to surface waters is prohibited.**

**RECOMMENDATION:**

Adopt Order No. R8-2009-0045 as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt  
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch  
U.S. Fish and Wildlife Service, Carlsbad  
State Water Resources Control Board, Office of the Chief Counsel – David Rice  
State Department of Water Resources, Glendale  
State Department of Fish and Game, San Diego – Dolores Duarte  
California Department of Public Health, Santa Ana - Oliver Pacifico  
Orange County Water District - Nira Yamachika/Greg Woodside  
Orange County Public Works - Chris Crompton  
Orange County Public Works, Flood Control – Andy Ngo  
Orange County Health Care Agency – Larry Honeybourne  
South Coast Air Quality Management District - – Dr. Barry R. Wallerstein  
Orange County Coastkeeper - Garry Brown  
Lawyers for Clean Water C/c San Francisco Baykeeper  
Dr. Jack Skinner  
Defend the Bay - Robert J. Caustin  
Irvine Ranch Water District - Steve Malloy  
California Department of Transportation, District 12 - Grace Pina-Garrett  
City of Tustin - Dana R. Kasdan  
Irvine Community Development Company – Tina Bachelder  
City of Lake Forest - Robert L. Woodings  
City of Laguna Hills – Kenneth Rosenfield  
Golden State Water Company – Brandy O'Gorman, [bogorman@gswater.com](mailto:bogorman@gswater.com)  
City of Newport Beach - John Kappeler  
City of Santa Ana Public Works Agency - James Ross  
City of Irvine - Steve Ollo  
City of Costa Mesa – Fariba Fazeli  
Foothill Engineering & Dewatering - Wendell Bradford

California Regional Water Quality Control Board  
Santa Ana Region

Order No. R8-2009-0045

Amending Order No. R8-2007-0041, NPDES No. CAG918002  
General Discharge Permit For Discharges To Surface Waters Of Groundwater  
Resulting From Groundwater Dewatering Operations And/Or Groundwater Cleanup  
Activities At Sites Within The San Diego Creek/Newport Bay Watershed Polluted By  
Petroleum Hydrocarbons, Solvents, Metals And/Or Salts

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Water Board), finds that:

1. On November 30, 2007, the Regional Water Board adopted Order No. R8-2007-0041, NPDES No. CAG918002, prescribing general waste discharge requirements for discharges to surface waters of groundwater resulting from groundwater dewatering operations and/or groundwater cleanup activities at sites within the San Diego Creek/Newport Bay watershed polluted by petroleum hydrocarbons, solvents, metals and/or salts.
2. Order No. R8-2007-0041 consolidated the requirements of two general permits for discharges within the San Diego Creek/Newport Bay watershed; Order No. R8-2007-0008, NPDES No. CAG918001, and Order No. R8-2004-0021, NPDES No. CAG998001. Specifically, Order No. R8-2007-0041 includes requirements to regulate groundwater-related discharges that may contain selenium, nutrients, volatile organic compounds, solvents or metals.
3. Order No. R8-2004-0021, NPDES No. CAG998002, regulates the short-term groundwater-related discharges that are expected to last one year or less, and discharges that pose an insignificant threat to water quality (de minimus discharges) within the San Diego Creek/Newport Bay watershed. This Order was amended by Order No. R8-2006-0065 to authorize discharges of wastewater effluent associated with testing of selenium and nitrogen treatment technologies and BMPs and to prohibit the discharge of brine, resins, sludge or other secondary concentrates from treatment systems to surface waters.
4. In the process of consolidation of permit requirements in Order No. R8-2007-0041, certain discharges regulated under Order No. R8-2004-0021, as amended, were omitted. Specifically, Order No. R8-2007-0041 failed to include de minimus discharges and wastewater effluent associated with testing of selenium and nitrogen treatment technologies and BMPs. Further, Order No. R8-2007-0041 failed to include the prohibition regarding the discharge of brine, resins, sludge or other secondary concentrates from treatment systems to surface waters. Order No. R8-2004-0021 is due to expire on December 20, 2009 and is not planned to

be renewed since regulatory coverage can and should be provided under Order No. R8-2007-0041. However, it is necessary to amend Order No. R8-2007-0041 to include the previously omitted de minimus discharges, discharges resulting from the testing of nitrogen and selenium treatment technologies and BMPs, and to include the prohibition specified in Order No. R8-2006-0065.

5. In accordance with California Water Code Section 13389, amending the general waste discharge requirements for the types of discharges regulated under Order No. R8-2007-0041 is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (Commencing with Section 21100), Division 13 of the Public Resources Code.
6. The Regional Water Board has notified the dischargers and other interested agencies and persons of its intent to amend Order No. R8-2007-0041 and has provided them with an opportunity to submit their written views and recommendations.
7. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the amendment of general waste discharge requirements for de minimus discharges.

**IT IS HEREBY ORDERED** that Order No. R8-2007-0041 be amended as follows:

1. Order No. R8-2007-0041, page 4, modify last paragraph of Section I. Discharge Information as follows:

This general permit will regulate de minimus discharges and wastewater effluent associated with testing of selenium and nitrogen treatment technologies and BMPs, and discharges of treated wastewater from groundwater dewatering and/or groundwater remediation activities at sites polluted by petroleum hydrocarbons, solvents, metals and/or salts within the San Diego Creek/Newport Bay watershed.

2. Order No. R8-2007-0041, page 6, modify paragraph 5., as follows:
  5. The Discharger shall submit for approval by the Executive Officer of the Regional Water Board a fixed hardness value based on the 5th percentile of effluent hardness measurements or the average ambient receiving water hardness measurements for those sites polluted with metals (lead, cadmium, copper, chromium (III), nickel, silver, and zinc). For purposes of calculating the applicable fresh water aquatic life criteria and effluent limitations for metals, the required fifth percentile hardness value has an upper limit of 400 mg/L as calcium carbonate, unless a site specific water effect ratio (WER) is



developed and approved by the Regional Water Board. The California Toxic Rule explains that if the hardness is over 400 mg/L, two options are available to calculate the freshwater metals criteria (which are used as the basis for setting effluent limitations): (1) Calculate the criterion using a default WER of 1.0 and using a hardness of 400 mg/L in the hardness equation; or (2) calculate the criterion using a WER and the actual ambient hardness of the surface water in the equation.

3. Order No. R8-2007-0041, page 8, modify paragraph II.B.3., as follows:

3. For freshwater discharges, within forty five (45) days of the effective date of this Order, Dischargers from those sites polluted with leaded gasoline or metals shall submit for approval by the Regional Water Board Executive Officer the proposed hardness value based on 5th percentile of effluent hardness measurements or the average ambient freshwater receiving water hardness measurements. Once approved by the Executive Officer, this hardness value shall be the basis for determining the lead/metals effluent limits for the discharge from Attachment "B" of this Order.

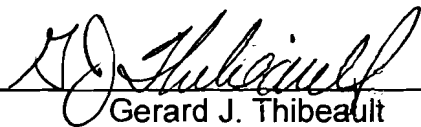
4. Order No. R8-2007-0041, page 10, modify last paragraph of Finding B., as follows:

In summary, this general permit will regulate discharges from activities involving groundwater dewatering, discharges that pose an insignificant threat to water quality, wastewater effluent associated with testing of selenium and nitrogen treatment technologies and BMPs and groundwater remediation in areas where contamination from petroleum hydrocarbons, solvents, metals and/or salts may be present. These activities include the following:

1. Wastes associated with well installation, development, test pumping and purging;
2. Aquifer testing wastes;
3. Dewatering wastes from subterranean seepage;
4. Groundwater dewatering wastes at construction sites;
5. Groundwater remediation.
6. Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
7. Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
8. Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
9. Discharges from potable water supply systems resulting from initial system startup, routine startup, sampling of influent flow, system failures, pressure releases, etc.;
10. Discharges from fire hydrant testing or flushing;
11. Air conditioning condensate;
12. Swimming pool discharge;

13. Discharges resulting from diverted stream flows;
  14. Decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities;
  15. Discharges of wastewater effluent associated with testing of selenium and nitrogen treatment technologies and BMPs into surface water; and
  16. Other similar types of wastes as determined by the Regional Water Board Executive Officer, which pose a de minimus threat to water quality yet must be regulated under waste discharge requirements.
5. Order No. R8-2007-0041, page 17, add new paragraph G. in Section IV., as follows:
- G. The discharge of brine, resins, sludge or other secondary concentrates from treatment systems to surface waters is prohibited.
6. All other conditions and requirements of Order No. R8-2007-0041 shall remain unchanged

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on July 20, 2009.

  
Gerard J. Thibeault  
Executive Officer

**California Regional Water Quality Control Board  
Santa Ana Region**

**December 10, 2009**

**Item: 9**

**Subject: Issuance of Time Schedule Order No. R8-2009-0069** for Dischargers Enrolled in Order No. R8-2007-0041, NPDES No. CAG918002, General Discharge Permit for Discharges to Surface Waters of Groundwater Resulting from Groundwater Dewatering Operations and/or Groundwater Cleanup Activities at sites within the San Diego Creek/Newport Bay Watershed Polluted by Petroleum Hydrocarbons, Solvent, Metals and/or Salts.

**Summary:**

The issuance of Time Schedule Order (TSO) No. R8-2009-0069 is appropriate and necessary to provide additional time for dischargers in the Newport Bay watershed to come into compliance with numeric effluent limitations for selenium that are specified in Order No. R8-2007-0041, which requires compliance with those limitations no later than December 20, 2009. The numeric selenium limitations are based on the current selenium water quality objectives established by the California Toxics Rule (CTR).

Total Maximum Daily Loads (TMDLs) and site-specific objectives (SSOs) for selenium are being developed by Regional Board staff in collaboration with the Nitrogen and Selenium Management Program (NSMP) Working Group. The TMDLs include numeric targets and allocations based on (i) the recommended selenium SSOs for the Newport Bay watershed, and, in the event the SSOs are not adopted, (ii) current CTR selenium objectives. These TMDLs and SSOs are expected to be presented to the Regional Board for consideration in the spring of 2010.

When approved, the selenium SSOs will replace the existing CTR-based water quality objectives for the Newport Bay watershed. The selenium effluent limitations in Order No. R8-2007-0041 will be revised as necessary in response to the approved TMDLs/SSOs.

The proposed TMDLs include an implementation plan and a schedule for compliance that will serve as the basis for a revised schedule for compliance with the selenium effluent limitations in Order No. R8-2007-0041. However, the compliance schedule authorization provided by the TMDLs will not become effective for the purposes of revising Order No. R8-2007-0041 until the TMDLs are approved by the USEPA. The TMDL approval process is expected to take more than one year. The TSO will extend the schedule for compliance with the numeric selenium effluent limitations in Order No. R8-2007-0041 for a maximum

of five years from the date of adoption of the TSO. This compliance schedule extension will allow the TMDL/SSO approval and permit amendment processes to be completed such that an appropriate compliance schedule, effluent limitations, and other requirements can be incorporated in the waste discharge requirements. This compliance schedule extension is appropriate because of the very significant commitment of resources by the NSMP Working Group to assist in the development of the selenium TMDLs/SSOs and a cutting-edge regional selenium management program (including development of selenium treatment technologies) for the Newport Bay watershed that will result in the achievement of water quality standards for a very difficult-to-address bioaccumulative pollutant.

**Discussion:**

In 2002, as part of a number of TMDLs for toxic pollutants, USEPA promulgated TMDLs for selenium for the San Diego Creek subwatershed and both Upper and Lower Newport Bay, based primarily on exceedance of the currently applicable CTR selenium criteria for freshwater, as well as trends in selenium concentrations in freshwater fish tissue and the proximity of Newport Bay to the San Diego Creek subwatershed. Rising groundwater in the San Diego Creek subwatershed is the primary source of selenium to the Bay.

In December 2004, the Regional Board adopted Order No. R8- 2004-0021, NPDES No. CAG998002, General Waste Discharge Requirements for Short-Term Groundwater-Related Discharges and De Minimis Wastewater Discharges to Surface Waters within the San Diego Creek/Newport Bay Watershed. Prior to the issuance of Order No. R8-2004-0021, most dewatering and other types of groundwater discharges in the watershed were considered insignificant, or "de minimus", contributors of pollutants and had been regulated under the Regional Board's general de minimus NPDES permit. The issuance of Order No. R8-2004-0021 was necessitated by the recognition that groundwater-related discharges in the Newport Bay watershed had the potential to contribute selenium to the surface waters in the watershed and that such discharges could no longer be considered insignificant in light of the findings of selenium impairment leading to the USEPA TMDLs. Order No. R8-2004-0021 included final numeric water quality based effluent limitations for selenium discharges based on the applicable CTR selenium criteria.

In adopting Order No. R8-2004-0021, the Regional Board also recognized that there were no conventional selenium treatment technologies that could be applied to achieve the selenium limitations and that, therefore, immediate compliance with the selenium limitations in the Order would likely be infeasible for many dischargers. Accordingly, Order No. R8-2004-0021 includes a schedule for compliance with the final numeric selenium limitations. Pursuant to the compliance schedule provisions of the State Board's policy for

implementation of the CTR criteria (the "SIP"<sup>1</sup>), Order No. R8-2004-0021 included a maximum five-year schedule for compliance with the selenium limitations, i.e, compliance with the selenium limitations was to be achieved as soon as possible but no later than December 20, 2009.

Numerous stakeholders within the Newport Bay watershed expressed ongoing concern that ultimate compliance with the selenium limitations, even with the five-year compliance schedule, would be highly problematic, given the lack of available, practicable treatment technology that could achieve the requisite selenium reductions. This concern, coupled with concerns about the validity and effectiveness of the CTR criteria for protecting biological resources in the watershed, prompted the formation of a voluntary program known as the Nitrogen and Selenium Management Program (NSMP), sponsored by the NSMP Working Group. The Working Group is comprised of many stakeholders in the Newport Bay watershed, including the County of Orange, municipalities within the watershed, other dischargers, and several environmental organizations. The Regional Board is a non-funding member of the Working Group. The Working Group proposed to develop and implement a five-year Work Plan designed to evaluate and recommend refinements to the USEPA selenium TMDLs, to develop treatment technologies and an appropriate implementation plan for the refined TMDLs, and to consider recommendations for a site-specific selenium objective for the Newport Bay watershed that would supplant the CTR selenium criteria<sup>2</sup>.

Order No. R8-2004-0021 included requirements that reflected the proposed NSMP Working Group approach and required the development, Regional Board approval, and thence implementation of a Work Plan to accomplish those specific tasks. Order No. R8-2004-0021 provided that participation by dischargers in the NSMP Working Group and effective and timely implementation of the approved Work Plan would constitute interim, performance-based limitations. The Order also allowed dischargers who did not wish to participate in the NSMP Working Group to implement a program approved by the Executive Officer to offset selenium discharges in excess of the final numeric effluent limitations. Steps to implement that offset program were considered interim, performance-based limitations. The intent of the offset program was to assure that there would be no net loading of selenium to surface waters in the Newport Bay watershed as the result of the discharges prior to full compliance with the final numeric effluent limitations.

In 2007, the Regional Board adopted Order No. R8-2007-0041 as part of a permit streamlining effort. Like Order No. R8-2004-0021, Order No. R8-2007-

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<sup>1</sup> "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California"

<sup>2</sup> The Working Group also committed to perform work to support the review of the Nutrient TMDL established for the Newport Bay watershed in 1998 and to formulate a nutrient management plan.

0041 regulates groundwater-related discharges but also includes requirements for discharges from groundwater cleanup operations within the Newport Bay watershed. This combined approach obviates the need for dischargers who may need authorization for both types of discharges to obtain coverage under both permits, for which payment of both permit fees would be required. Order No. R8-2007-0041 includes the same NSMP/offset interim performance-based limitations as Order No. R8-2004-0021. Consistent with the SIP, Order No. R8-2007-0041 maintains the same compliance schedule for achieving compliance with final numeric water quality based effluent limitations for selenium as Order No. R8-2004-0021, i.e., compliance with the final numeric effluent limitations must be achieved no later than December 20, 2009.<sup>3</sup> Discharge authorization for enrollees under Order No. R8-2004-0021 has been transferred to Order No. R8-2007-0041 and Order No. R8-2004-0021 now has been rescinded.

The approved NSMP Work Plan has now been essentially completed and has resulted in recommended, revised TMDLs, including an implementation plan. The TMDLs, including the implementation plan, are continuing to be refined further and are expected to be presented as a Basin Plan amendment for the Regional Board's consideration in the spring of 2010. Further, the NSMP Working Group effort has resulted in specific recommendations for site-specific objectives (SSOs) for selenium for the Newport Bay watershed. When fully approved, these SSOs will replace the CTR-based objectives for selenium in the Newport Bay watershed. These SSOs are reflected in the TMDLs to be recommended to the Regional Board and will be included in the Basin Plan amendment package to be considered by the Regional Board in the spring of 2010. In the event the SSOs are not adopted, the TMDLs also include alternative CTR-based numeric targets and allocations.

The proposed TMDLs currently include a recommended compliance schedule of a maximum of 15 years from the date the TMDLs become effective. The TMDLs become effective for NPDES and other Clean Water Act purposes once they are approved by USEPA. Once the TMDLs are fully approved, including by USEPA, the compliance schedule authorization provided in the TMDLs can be used as the basis for including compliance schedules for selenium limitations in NPDES permits. Once the TMDLs are finally approved, Regional Board staff will recommend specific revisions to Order No. R8-2007-0041 (and/or the issuance of a new permit, as appropriate) to incorporate requirements consistent with the TMDLs, including revised schedules for compliance and selenium effluent limitations (including, potentially, narrative or performance-based limitations). However, until the TMDL approval process is completed, the effective compliance date for those limits are those established in the existing Order. The TSO will provide for compliance with the existing Order.

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<sup>3</sup> The first time that the selenium-related discharges were subject to CTR-based effluent limitations was in Order No. R8-2004-0021, and discharges were required to meet CTR-based effluent limits no later than December 20, 2009.

While significant progress has been made to identify potential selenium treatment technologies (including regional treatment), compliance with the final numeric selenium limitations in Order No. R8-2007-0041 on December 20, 2009 remains infeasible for many dischargers. A significant amount of work remains to be done to further evaluate potential treatment technologies to assure their efficacy before costly, full-scale implementation is considered. The Working Group has prepared a draft BMP Strategic Plan that outlines the steps proposed to further address selenium BMP evaluation and implementation over the fifteen year period currently proposed by the draft TMDLs. Implementation of the BMP Strategic Plan is expected to result in compliance with the draft TMDLs and, thereby, water quality standards (as they may or may not be amended by the SSOs). The development and implementation of such a BMP plan is a requirement of the draft TMDLs for dischargers who elect to comply with applicable allocations through the NSMP process.

Absent additional compliance schedule relief, after December 20, 2009, groundwater-related discharges by the dischargers enrolled in Order No. R8-2007-0041 may result in violations of the final selenium effluent limitation in that Order. Such violations would likely result in the imposition of mandatory minimum penalties pursuant to section 13385 of the California Water Code.

Controlling sources of selenium inputs to surface waters in the Newport Bay watershed poses extraordinary challenges. As stated above, there is currently no readily available, conventional treatment technology that can be implemented in a reasonably practicable manner for point source or non-point sources of selenium. Further, in the Newport Bay watershed, approximately 85% of the existing selenium loads in surface waters originates from groundwater, and much of this load (about 78%) results from diffuse rising groundwater, which enters surface waters via springs and seeps in the unlined portions of the channels, and cracks and weepholes in storm drains and the concrete-lined portions of the channels. Discrete, groundwater-related discharges (e.g., groundwater dewatering and cleanup) and other regulated discharges (e.g., urban runoff) account for a relatively small part of the selenium load to surface waters. It is evident that selenium reductions needed to protect beneficial uses would be best achieved on a regional, watershed-wide scale.

The NSMP Working Group has made, and continues to make significant commitments of resources to develop a proposed watershed-wide selenium management strategy that will address rising groundwater, as well as dewatering and other types of discharges. The TMDLs that will be recommended to the Regional Board in early spring 2010 rely to a significant degree on that management strategy and its implementation. In light of those significant commitments by the Working Group, that a management strategy has been identified that is believed will achieve water quality standards but requires additional time to be approved and implemented, and in view of the recognized need to provide more time to evaluate and implement effective selenium

treatment BMPs, it is appropriate to provide additional schedule relief for compliance with the numeric selenium limitations in Order No. R8-2007-0041. Additional compliance schedule relief will allow for full approval of the TMDLs/SSOs and revision of the Order to incorporate revised compliance schedules and effluent limitations consistent with the TMDLs. The issuance of the TSO will not delay ultimate compliance with the TMDLs. Rather, the TSO will merely provide additional time for approval of the TMDLs/SSOs while protecting the dischargers who have committed and will commit significant resources to their development and implementation from enforcement for violations of Order No. R8-2007-0041.

California Water Code section 13300 states: "Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements." A detailed time schedule of actions proposed to address final selenium effluent limitation compliance has been submitted and is reflected in Tentative TSO No. R8-2009-0069. Dischargers seeking coverage under the TSO are required to implement these tasks in accordance with the schedule identified.

Once the TMDLs are approved and Order No. R8-2007-0041 is revised accordingly, including a revised schedule for compliance and selenium effluent limitations, the TSO will be rescinded.

**Recommendation:** Adopt Time Schedule Order No. R8-2009-0069 as presented.



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SANTA ANA REGION

TIME SCHEDULE ORDER NO. R8-2009-0069

For

DISCHARGERS ENROLLED UNDER ORDER NO. R8-2007-0041, NPDES NO. CAG918002,  
GENERAL DISCHARGE PERMIT FOR DISCHARGES TO SURFACE WATERS OF  
GROUNDWATER RESULTING FROM GROUNDWATER DEWATERING OPERATIONS  
AND/OR GROUNDWATER CLEANUP ACTIVITIES AT SITES WITHIN THE SAN DIEGO  
CREEK/NEWPORT BAY WATERSHED POLLUTED BY PETROLEUM HYDROCARBONS,  
SOLVENTS, METALS AND/OR SALTS

The California Regional Water Quality Control Board, Santa Ana Region (Regional Water Board), finds that:

1. In May 2000, the United States Environmental Protection Agency (USEPA) promulgated what is known as the California Toxics Rule (CTR), which consists of numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California (State). (See 40 C.F.R. 131.38.) USEPA promulgated the CTR based on a determination that the numeric criteria are necessary to protect human health and the environment. The CTR contains a numeric chronic aquatic life criterion for selenium in freshwater of 5 micrograms per liter (5 µg/L), as total recoverable selenium, and in saltwater of 71 µg/L, as total dissolved selenium. (40 C.F.R. 131.38(b)(1).)
2. The CTR provides the State with discretion in how to implement the relevant criteria. Accordingly, in March 2000, the State Water Resources Control Board ("State Water Board") adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The State Water Board amended the SIP in February 2005 with Resolution No. 2005-0019. USEPA has approved the SIP for use as the State's implementation plan for CTR constituents.
3. On June 14, 2002, USEPA promulgated Total Maximum Daily Loads (TMDLs) for Toxic Pollutants in San Diego Creek and Newport Bay. TMDLs were established for organochlorine compounds, organophosphate pesticides, metals (chromium, cadmium, mercury, copper, lead and zinc) and selenium.
4. The USEPA TMDLs established waste load allocations (WLAs) for discharges of groundwater to surface water for selenium based on the CTR chronic criteria for selenium in freshwater and saltwater. However, USEPA's TMDLs are not self-executing, contain no implementation plan, and have not been incorporated into the Basin Plan for the Santa Ana Region. Neither the State nor Regional Water Board has developed an implementation plan for the USEPA TMDLs.

5. On December 20, 2004, the Regional Water Board adopted General Waste Discharge Requirements for Short-Term Groundwater-Related Discharges and De Minimus Wastewater Discharges to Surface Waters within the San Diego Creek/Newport Bay Watershed, Order No. R8-2004-0021, NPDES No. CAG998002. Pursuant to the SIP, the Regional Water Board incorporated numeric selenium effluent limits based on the CTR chronic freshwater and saltwater aquatic life criteria into Order No. R8-2004-0021, with a compliance schedule requiring compliance with the final effluent limits to be achieved no later than December 20, 2009. As interim compliance measures, Order No. R8-2004-0021 allowed for compliance with the selenium effluent limitations through either an approved offset program or participation in the Nitrogen and Selenium Management Program [NSMP] prior to the December 20, 2009 date.
6. On October 13, 2006, the Regional Water Board adopted Order No. R8-2006-0065, which amended the type and nature of discharges authorized under Order No. R8-2004-0021.
7. On November 30, 2007, the Regional Water Board adopted Order No. R8-2007-0041, NPDES No. CAG918002. Order No. R8-2007-0041 is a general permit that regulates discharges of treated wastewater from groundwater dewatering and/or groundwater remediation activities at sites polluted by petroleum hydrocarbons, solvents, metals and/or salts within the San Diego Creek/Newport Bay watershed. Consistent with Order No. R8-2004-0021, Order No. R8-2007-0041 required compliance with final effluent limits based on the CTR chronic criteria for selenium by no later than December 20, 2009. Order No. R8-2007-0041 has replaced Order No. R8-2004-0021, and Order No. R8-2004-0021 has been rescinded.
8. Order No. R8-2007-0041 was later amended by Order No. R8-2009-0045, which was adopted by the Regional Water Board on July 20, 2009. Order No. R8-2009-0045 amended Order No. R8-2007-0041 by expanding and clarifying the nature of the discharges allowed under Order No. R8-2007-0041.
9. As of the date of this Order, the following entities are enrollees under Order No. R8-2007-0041 ("Existing Dischargers"):

| <u>Enrollees</u>                      | <u>Facility</u>                   | <u>Effective Date</u> |
|---------------------------------------|-----------------------------------|-----------------------|
| Ca Dept of Transportation District 12 | Dewatering-Irvine-Various-Newport | 6/14/2005             |
| Irvine Company                        | Dewatering, General               | 12/20/2004            |
| Newport Beach City                    | Dewatering, General               | 9/24/1998             |
| FOOTHILL ENG & DEWATERING, INC        | Dewatering, Various, Newport Bay  | 11/8/2002             |
| Irvine Ranch Water District           | Dewatering, Irvine                | 4/20/2005             |
| Golden State Water Company - Anaheim  | Dewatering, Various               | 4/7/2005              |
| Orange Cnty Flood Control Dist        | Dewatering, Irvine-Newport Bay    | 2/24/2005             |
| Costa Mesa City                       | Dewatering, C.M.-Newport Bay      | 3/28/2005             |
| Tustin City                           | Dewatering, Newport Bay           | 3/28/2005             |

|                            |  |            |
|----------------------------|--|------------|
| Laguna Hills City          | Dewatering, Laguna Hills, Newport                        | 3/28/2005  |
| Lake Forest City           | Dewatering, Lake Forest, Newport                         | 3/28/2005  |
| Santa Ana City PWD         | Dewatering, Santa Ana City                               | 2/24/2006  |
| Mariners Mile Gateway LLC  | Potable Water System<br>GW Cleanup-Newport Beach, Orange | 10/26/2006 |
| Integral Communities I Inc | GW Cleanup, Sandpoint, Santa Ana                         | 2/27/2008  |
| Irvine City                | Lane Channel -Irvine                                     | 1/11/2008  |
| G & M Oil Company Inc      | GW Cleanup-C.M., Bristol #21                             | 2/5/2008   |
| ETCO Investment            | Newport Marina/Bridgeport Project                        | 9/11/2008  |

Entities that enroll under Order No. R8-2007-0041 after the effective date of this Order are referred to as "Future Dischargers." Any entity that enrolls under Order No. R8-2007-0041 is a "Discharger." Although listed above as an Existing Discharger, the City of Irvine, and potentially others, is not presently discharging under Order No. R8-2007-0041 and the City of Irvine has no present intention of discharging thereunder for the foreseeable future.

10. Section V.A.1.a of Order No. R8-2007-0041 contains final effluent limitations based on CTR criteria for total recoverable selenium for discharges to San Diego Creek and its tributaries at the following levels: (1) the maximum daily concentration limit ( $\mu\text{g/L}$ ) is 8.2; and (2) the average monthly concentration limit ( $\mu\text{g/L}$ ) is 4.1.
11. Section V.A.1.a of Order No. R8-2007-0041 contains final effluent limitations based on CTR criteria for total recoverable selenium for discharges to Upper and Lower Newport Bay at the following levels: (1) the maximum daily concentration limit ( $\mu\text{g/L}$ ) is 116; and (2) the average monthly concentration limit ( $\mu\text{g/L}$ ) is 58.
12. Section V.A.1.b of Order No. R8-2007-0041 provides that compliance with the selenium effluent limitations specified in Section V.A.1.a shall be achieved as soon as possible but no later than December 20, 2009.
13. In response to Order No. R8-2004-0021, many of the San Diego Creek/Newport Bay watershed stakeholders/dischargers established a Nitrogen and Selenium Management Program (NSMP) Working Group. The NSMP Working Group includes representatives from local governments and agencies, developers and other private entities, water districts, State agencies including the Regional Water Board, and environmental groups.
14. Order No. R8-2004-0021 required the NSMP Working Group to develop a work plan to assist in identifying a comprehensive management plan for selenium and nitrogen and, in particular, to identify an approach to address rising groundwater, the largest source of selenium in the watershed. The NSMP Work Plan and Compliance Strategy (Work Plan) was approved by the Executive Officer of the

Regional Water Board in July 2005. The Working Group has been implementing the approved Work Plan since July 2005.

15. The NSMP Work Plan included a number of selenium-related tasks, including the development of a conceptual model for selenium, an evaluation of selenium sources and loads, an assessment of the bioavailability and impacts of selenium on beneficial uses in the watershed, an evaluation of selenium speciation analytical methods, an evaluation and selection of potentially viable Best Management Practices (BMPs) and treatment technologies for selenium, pilot testing of the most promising BMPs/treatment technologies, and, if necessary and/or appropriate, the development of site-specific objectives (SSOs) for selenium.
16. Controlling sources of selenium in the Newport Bay watershed poses extraordinary challenges given the watershed-wide scale of the selenium problem, its diffuse origin (largely rising groundwater) and the limited land available for placement of treatment facilities and BMPs because of the high degree of urbanization in the watershed. In addition, there is currently no readily available, conventional treatment technology that can be implemented in a reasonably practicable manner for point source discharges. In the Newport Bay watershed, approximately 85% of the existing selenium loads in surface waters originates from groundwater, and much of this load (about 78%) results from diffuse rising groundwater, which enters surface waters via springs and seeps in the unlined portions of the channels, and cracks and weepholes in storm drains and the concrete-lined portions of the channels. Discrete, groundwater-related discharges (e.g., groundwater dewatering and cleanup) and other regulated discharges (e.g., urban runoff) account for a relatively small part of the selenium load to surface waters. Therefore, selenium reductions needed to protect beneficial uses are best achieved on a regional, watershed-wide scale, addressing both non-point and point sources.
17. At this time, Regional Water Board staff, in collaboration with the NSMP Working Group, is developing TMDLs and SSOs for selenium in the Newport Bay watershed<sup>1</sup> to be presented for consideration by the Regional Water Board in early 2010 (the "Board TMDLs/SSOs"). Once approved, the SSOs will replace the CTR criteria for the relevant water bodies. As currently designed, implementation of the Board TMDLs/SSOs will involve a collaborative watershed-based approach coordinated by and through the NSMP Working Group.

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<sup>1</sup> The Newport Bay watershed encompasses both upper and lower Newport Bay and its tributaries, San Diego Creek, Santa Ana Delhi, and Big Canyon subwatersheds, and the Costa Mesa and Santa Isabel channels. To date, NPDES permits, TMDLs and amendments to the Basin Plan for the Santa Ana Region have referred to the watershed as the "San Diego Creek/Newport Bay" watershed. However, the County of Orange recently performed a comprehensive evaluation of all the watersheds located within their boundaries with the intent of verifying watershed divisions and nomenclature. The County decided that the San Diego Creek/Newport Bay watershed would simply be referred to as the Newport Bay watershed. All of the County programs, including the NPDES program, and all County documents now refer to the Newport Bay watershed. For consistency with the new nomenclature, these TMDLs/SSOs will also refer to the watershed as the Newport Bay watershed. Similarly, future NPDES permits will employ this nomenclature.

18. Through development of the Board TMDLs/SSOs and the NSMP, considerable new information has been, and continues to be, developed, including scientific and technical information related to the sources of selenium and its potential adverse impacts on beneficial uses in the Newport Bay watershed. This information was not available at the time Order No. R8-2004-0021 was issued, and much of it has been developed since Order No. R8-2007-0041 was issued. This new information indicates that the final CTR-based effluent limitations may not adequately protect beneficial uses within the Newport Bay watershed. Upon final approval of the Board TMDLs/SSOs, Order No. R8-2007-0041 will be revised to incorporate revised selenium effluent limitations and/or receiving water limitations consistent with the assumptions and requirements of the WLAs contained in the Board TMDLs/SSOs, and this Order will be rescinded. These revised limitations will be (and the interim limitations in this Order are) consistent with anti-backsliding requirements of the Clean Water Act.
19. Given the complexity of the selenium problem and the limited practicable treatment technologies, a collaborative watershed-based approach to reducing selenium provides the best opportunity to achieve water quality objectives for selenium and to assure the protection of beneficial uses. Accordingly, to the extent they seek coverage, this Order requires participation in the NSMP by Dischargers to ensure that waste discharges containing selenium are brought into compliance with the CTR-based selenium effluent limitations in as short of a time period as possible. The NSMP has been structured to allow participation by all dischargers (short- and long-term, current and future) enrolled under Order No. R8-2007-0041.
20. Dischargers who do not seek coverage under this Order shall comply with the final CTR-based effluent limitations for selenium no later than December 20, 2009, as provided in Order No. 2007-0041.
21. The following is a schedule of tasks submitted by the NSMP Working Group that will be completed within the next five years.

| <b>Task No.</b> | <b>Description of Activity</b>   | <b>Compliance Date</b>   |
|-----------------|--|--|
| 1.              | Discharger to elect to participate in the Nitrogen and Selenium Management Program (NSMP). (The Discharger's participation in the NSMP will be deemed to fulfill the general requirements outlined below that are not particular discharger tasks, so long as the discharger remains in material compliance with the terms of an executed NSMP Cooperative Watershed Program Funding Agreement.) | By the later of December 20, 2009 or the commencement of any discharge under Order No. R8-2007-0041. |
| 2.              | NSMP Working Group to develop and submit a Funding Agreement, including funding for offset, mitigation or trading provisions, to provide a consistent source of funding to address point source and nonpoint source discharges of selenium and nitrogen within the watershed.  |  |

| Task No. | Description of Activity   | Compliance Date  |
|----------|---|--|
|          | <p>a. Submit Funding Agreement and then current list of Dischargers participating therein to Regional Water Board</p> <p>b. Execute Funding Agreement</p>   | <p>a. July 1, 2010</p> <p>b. Participating dischargers seeking coverage under this TSO to execute Funding Agreement within 180 days of the participating Discharger's approval of the terms of the submitted Funding Agreement</p> |
| 3.       | <p>All dischargers are required to submit documentation with their notice of intent (NOI) to discharge that the feasibility of eliminating or reducing the volume of the discharge has been evaluated. The feasibility evaluation options will consist of (1) discharge to land; (2) discharge to sewer; and (3) offsite transport and disposal. Specifications and limitations of the three methods were listed in the NSMP report <i>Volume Reducing Best Management Practices for Short-Term Groundwater Related Discharges within Orange County – August 2005</i></p> | Ongoing  |
| 4.       | NSMP Working Group to develop Method of Compliance Workplan/Schedule (BMP Strategic Plan)   |  |

| Task No. | Description of Activity   | Compliance Date   |
|----------|---|---|
|          | <p>a. A proposed BMP Strategic Plan and BMP Effectiveness Monitoring Plan will be developed by the NSMP Working Group for submittal to the Regional Water Board.</p> <p>The BMP Strategic Plan is to include the following elements:</p> <ol style="list-style-type: none"> <li>1. A description of an approach to implement pollution prevention, source control and treatment control BMPs to meet TMDL targets for selenium;</li> <li>2. Identification of BMP implementation priority areas that consider the level of biological significance and selenium concerns;</li> <li>3. Identification of candidate source and/or treatment controls believed important to meet operative TMDL targets, including:               <ol style="list-style-type: none"> <li>a. type and approximate locations of controls;</li> <li>b. timing for implementation;</li> <li>c. treatment capacity;</li> <li>d. cost of implementation; and</li> <li>e. anticipated removal rates and/or load reductions</li> </ol> </li> <li>4. Early Action Tasks anticipated to be completed within 5 years from the date of this Order may include:               <ol style="list-style-type: none"> <li>a. type and approximate locations of controls;</li> <li>b. timing for implementation;</li> <li>c. treatment capacity;</li> <li>d. anticipated removal rates and/or load reductions; and</li> <li>e. study goals and relevance to future projects</li> </ol> </li> <li>5. A BMP Effectiveness Monitoring Program;</li> <li>6. Milestones for Plan review, progress assessment and final selection of source and/or technology controls;</li> <li>7. Final Control Technology Implementation Outline (Phase II)</li> </ol> | <p>a. January 1, 2011</p>   |
|          | b. NSMP Working Group to commence implementation of BMP Strategic Plan  | b. Within 90 days of Regional Water Board approval.                   |
|          | c. NSMP Working Group to submit Annual BMP Strategic Plan implementation progress reports with corresponding decision tree schedule dependent on implementation success and subsequent development of selenium reduction technologies with the goal of implementing BMPs which are reasonably feasible to implement and which have been proven to be effective.   | c. Annually after Regional Water Board Approval of BMP Strategic Plan |
| 5.       | <p>Irrigation Reduction and Control Program</p> <p>Municipal dischargers seeking coverage under this TSO shall adopt an updated Model Water Efficient Landscape Ordinance (A.B. 1881) or one that is "at least as effective as" that Ordinance.</p>   | By the later of January 1, 2010 or as required by A.B 1881.           |
| 6.       | NSMP Working Group to submit and implement Regional Monitoring Program as follows:  |   |

| Task No. | Description of Activity  | Compliance Date   |
|----------|--|---|
|          | a. Regional monitoring program (RMP) for selenium to be submitted to Regional Water Board for approval | a. January 1, 2011  |
|          | b. Commence implementation of monitoring program   | b. Within 90 days of Regional Water Board approval of RMP |
|          | c. Submit annual monitoring reports  | c. Annually after Regional Water Board Approval of RMP    |

The NSMP Working Group will submit to the Regional Water Board on or before each compliance date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance will be stated, and will include an estimate of the date when the NSMP will be in compliance. The NSMP will notify the Regional Water Board by letter when it returns to compliance with the time schedule.

22. Enrollment and participation in the NSMP Working Group has been established for Existing Dischargers pursuant to their execution of the NSMP Memorandum of Procedure, or pursuant to their execution and Working Group approval of the First Amendment to Memorandum of Procedure. Future Dischargers wishing to enroll and participate in the NSMP Working Group shall establish their enrollment and participation by execution of a duly approved future amendment to the Memorandum of Procedure as amended by the First Amendment of Procedure.
23. This Order provides interim selenium effluent limitations in lieu of the effluent limitations set forth in Order No. R8-2007-0041. Without these interim limitations, Dischargers' waste discharges after December 20, 2009 threaten to exceed the effluent limitations set forth in Findings 10 and 11 of this Order and, thus, threaten to violate Order No. R8-2007-0041.
24. California Water Code (CWC) section 13300 states: "Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."



25. This Order is issued in accordance with CWC section 13300 and establishes a time schedule for compliance.
26. In accordance with CWC section 13385(j)(3), the Regional Water Board finds that each Discharger may not be able to consistently comply with the final effluent limitations for selenium set forth in Order No. R8-2007-0041. These limitations are new requirements that became applicable to Order No. R8-2007-0041 after the effective date of adoption of the waste discharge requirements, and after July 1, 2000, for which new or modified control measures are necessary in order to comply with the limitations, and the new or modified control measures cannot be designed, tested, installed, and put into operation within 30 calendar days.
27. This Order also applies to Future Dischargers (to the extent they seek coverage hereunder) because in many, if not all cases, they contemplated their discharges at a time when the final effluent limitations for selenium as set forth in Order No. R8-2007-0041 were not yet effective.
28. CWC section 13385(h) and (i) require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. However, CWC section 13385(j) exempts certain violations from the mandatory minimum penalties. CWC section 13385(j)(3) exempts a discharge from mandatory minimum penalties "where the waste discharge is in compliance with either a cease and desist order issued pursuant to CWC section 13301 or a time schedule order issued pursuant to CWC section 13300, if all the [specified] requirements are met."
29. Compliance with this Order exempts the Dischargers from mandatory penalties for violations of the effluent limitation for Total Recoverable Selenium, as set forth in section V.A.1.a of Order No. R8-2007-0041 in accordance with CWC section 13385(j)(3).
30. CWC section 13385(j)(3)(A) requires this Order to specify the actions that the Discharger is required to take in order to correct the potential violations that would otherwise be subject to mandatory minimum penalties. This Order requires the Dischargers to develop and implement new or modified control measures designed to achieve compliance with the effluent limitations as set forth in Findings 10 and 11 of this Order.
31. CWC section 13385(j)(3)(D) requires the preparation and implementation of a pollution prevention plan pursuant to CWC section 13263.3. In order to obtain authorization under Order No. 2007-0041, Dischargers are required to demonstrate that they have documented and made all practicable attempts to avoid, reduce or eliminate the discharge of selenium. The reduction/elimination of selenium discharges may be accomplished through volume reduction, including sewerage. Potential volume reduction measures were evaluated by the NSMP Working Group and three volume reduction BMPs, including sewerage, were

deemed feasible. Selenium occurs in the groundwater-related discharges regulated under Order No. 2007-0041 as the result of additions from natural processes not subject to the control of the Dischargers. Therefore, with respect to the selenium discharges addressed by Order No. 2007-0041, the evaluation and implementation of reasonably feasible discharge volume reduction measures, and the evaluation of and adherence to project design features or other practices that result in discharge avoidance fulfill the requirements of a Pollution Prevention Plan.

32. The interim effluent limitations established by this Order for Existing Dischargers shall be performance-based and set at lowest reasonably feasible historical discharge levels, taking into account precipitation-driven and other sources of variation in selenium concentrations; the interim effluent limitations for Future Dischargers shall also be performance-based and set at the lowest reasonably feasible levels based on consideration of requisite pre-discharge selenium quality characterization and historical selenium discharge levels for similar discharges, taking into account precipitation-driven and other sources of variation in selenium concentrations.
32. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, *et seq.*), in accordance with Section 15321(a)(2), Title 14, California Code of Regulations.
33. Any person adversely affected by this action of the Regional Water Board may petition the State Water Board to review the action. The petition must be received by the State Water Board Office of the Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

**IT IS HEREBY ORDERED THAT** pursuant to CWC Section 13300 and 13385, the Existing Dischargers listed in this Order and Future Dischargers under Order No. R8-2007-0041 shall comply with the following time schedule to ensure compliance with the final effluent limitations for selenium contained in Order No. R8-2007-0041, and as set forth in Findings 10 and 11 herein.

1. Dischargers seeking coverage under this Order shall elect to participate in the Nitrogen and Selenium Management Program (NSMP) and shall provide to the Executive Officer of the Regional Water Board a copy of the Memorandum of Procedure, as amended, showing Discharger's membership in the Working Group.
2. Dischargers seeking coverage under this Order shall re-certify, as required by their Notice of Intent, that they have documented and made all practicable attempts to avoid, reduce or eliminate the discharge of selenium as required by Section II.A.3 of Order No. R8-2007-0041, within 60 days from the date of this Order, or prior to any discharge under Order No. R8-2007-0041, whichever date is later.

3. Dischargers seeking coverage under this Order shall comply with the following interim effluent limitations for Total Recoverable Selenium during the pendency of this Order; provided the NSMP Working Group is complying with the tasks and process described in Finding 21 during the period of discharge (as established by the Discharger to the satisfaction of the Executive Officer), such Dischargers shall be deemed in compliance with this Order:
  - a. Existing Dischargers shall submit to the Executive Officer for approval, no later than 60 days following the adoption of this Order, a performance-based selenium effluent limitation that is based on historical selenium discharge levels (e.g., the lowest reasonably feasible concentration based on their historical selenium discharges). Upon approval by the Executive Officer, such Discharger must not exceed this interim effluent limitation during the pendency of this Order.
  - b. Future Dischargers shall submit to the Executive Officer for approval, prior to any discharge authorized under Order No. R8-2007-0041, a performance-based effluent limitation for selenium that is based on the requisite pre-discharge characterization of selenium quality and consideration of historical selenium discharge concentrations for similar discharges (e.g., the lowest reasonably feasible concentration based on prior selenium discharges and historical practices, if any, and those of other similarly-situated dischargers). Upon approval by the Executive Officer, such Discharger must not exceed this interim effluent limitation during the pendency of this Order.
4. Dischargers who enroll under Order No. R8-2007-0041 but who do not seek coverage under this Order shall comply with final effluent limitations for selenium by no later than December 20, 2009, as set forth in Order No. R8-2007-0041.
5. If, in the opinion of the Regional Water Board Executive Officer, any Discharger seeking coverage under this Order fails to comply with the provisions of this Order, the Executive Officer may apply to the State Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability. If compliance with this Order is not achieved, the Discharger would not be exempt from the mandatory minimum penalties for violation of certain effluent limitations, and may be subject to issuance of a Cease and Desist Order in accordance with CWC section 13301.
6. Any person signing a document submitted under this Order shall make the following certification:

*"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals*

*immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

7. This Order shall remain in effect for a maximum of five years from the effective date or until such time as Order No. R8-2007-0041 is re-issued or amended to incorporate the revised selenium effluent limitations and/or receiving water limitations that are consistent with the assumptions and requirements of the WLAs contained in the approved Board TMDLs/SSOs.

This Order is effective upon the date of signature.

  
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GERARD J. THIBEAULT, Executive Officer

\_\_\_\_\_  
December 10, 2009

**California Regional Water Quality Control Board  
Santa Ana Region**

**December 6, 2013**

**Item: 11**

**Subject: Issuance of Order No. R8-2013-0060**, Amending Time Schedule Order No. R8-2009-0069 for Dischargers Enrolled in Order No. R8-2007-0041, NPDES No. CAG918002, General Discharge Permit for Discharges to Surface Waters of Groundwater Resulting from Groundwater Dewatering Operations and/or Groundwater Cleanup Activities at Sites within the San Diego Creek/Newport Bay Watershed Polluted by Petroleum Hydrocarbons, Solvents, Metals and/or Salts.

**Summary**

Order No. R8-2007-0041 specifies selenium (and other) effluent limitations for groundwater-related discharges in the Newport Bay watershed, and requires compliance with these selenium limitations as soon as possible but no later than December 20, 2009. Time Schedule Order No. 2009-0069 (TSO), issued on December 10, 2009, extended that compliance schedule for a maximum of five years, or no later than December 10, 2014. The TSO remains in effect for a maximum of five years or until such time as Order No. R8-2007-0041 is re-issued to incorporate revised selenium effluent limitations and other requirements necessary to implement Regional Board approved selenium Total Maximum Daily Loads (TMDLs).

The Regional Board incorporated a selenium compliance schedule in Order No. R8-2007-0041 and issued the TSO in recognition of the extraordinary challenge of selenium control in the Newport Bay watershed, the lack of a practicable, conventional selenium treatment technology that could achieve the effluent limitations, significant commitments by watershed stakeholders to identify and implement a selenium management program, and the anticipated re-issuance of Order No. R8-2007-0041 based on TMDLs that were expected to be considered by the Regional Board in 2010 and subsequently approved and effective for regulatory purposes in or about 2012.

While significant progress continues to be made to address selenium in the Newport Bay watershed, it is appropriate to extend the TSO for a maximum of five years, or no later than December 10, 2019. This would extend the date for compliance with the selenium effluent limitations in Order No. R8-2007-0041 to no later than December 10, 2019. This compliance schedule extension is appropriate and justified since there remains no practicable selenium treatment technology that can assure compliance with the effluent limitations, the anticipated selenium TMDLs have not been completed or submitted for requisite approvals, and because there are ongoing and significant efforts to achieve selenium reductions necessary to comply with the TMDLs in advance of their approval.

## Background

Selenium issues in the Newport Bay watershed have a lengthy and complex history, which is summarized in the December 10, 2009 staff report describing the basis for the recommended issuance of TSO No. R8-2009-0069. A copy of that report is attached. Briefly, the salient points include the following:

- In 2002, the U.S. Environmental Protection Agency, Region IX (USEPA) promulgated TMDLs for selenium for the San Diego Creek subwatershed and both Upper and Lower Newport Bay, based primarily on evidence of beneficial use impairment due to exceedances of the applicable California Toxics Rule (CTR) selenium criteria for freshwater and the proximity of Newport Bay to San Diego Creek. The USEPA TMDLs relied heavily on selenium TMDLs then under preparation by Regional Board staff.
- In the Newport Bay watershed, approximately 85% of the selenium load in surface waters originates from groundwater, and much of this load (about 78%) results from diffuse rising groundwater that enters surface waters via springs and seeps in the unlined portions of the channels, and cracks and weepholes in storm drains and the concrete-lined portions of the channels. Discrete, groundwater-related discharges (e.g., groundwater dewatering and cleanup and other regulated discharges (e.g., urban runoff)) account for a relatively small part of the total selenium load to surface waters.
- Controlling sources of selenium in the Newport Bay watershed poses extraordinary challenges given the large scale of the selenium problem, its diffuse origin (largely rising groundwater), the lack of a readily available, conventional treatment technology that can be implemented in a reasonably practicable manner for point source discharges, and, because of extensive urbanization, the limited land available for the placement of potential treatment facilities/BMPs.
- In December 2004, the Regional Board adopted Order No. R8- 2004-0021, NPDES No. CAG998002, General Waste Discharge Requirements for Short-Term Groundwater-Related Discharges and De Minimus Wastewater Discharges to Surface Waters within the San Diego Creek/Newport Bay Watershed. Order No. R8-2004-0021 established selenium effluent limitations for these discharges for the first time. The limitations were based on the CTR selenium criteria.
- Because there was no conventional treatment technology available to point source dischargers and immediate compliance with the selenium effluent limitations in Order No. R8-2004-0021 was thus infeasible for many dischargers, Order No. R8-2004-0021 specified a compliance schedule for the selenium effluent limitations. That schedule required compliance as soon as possible but no later than December 20, 2009.
- Numerous watershed stakeholders remained concerned about the ability to comply with the selenium effluent limitations, even with the five-year compliance schedule, given the lack of practicable selenium treatment technology. The stakeholders also expressed concern about the validity and effectiveness of the CTR criteria for the protection of biological resources in the watershed. These considerations prompted

the formation of a voluntary program known as the Nitrogen and Selenium Management Program (NSMP), sponsored by the NSMP Working Group. The Working Group includes many stakeholders in the watershed. The Working Group proposed to develop and implement upon Regional Board approval a five-year Work Plan designed to: evaluate and recommend refinements to the USEPA selenium TMDLs; to evaluate potential selenium treatment technologies; recommend a comprehensive TMDL implementation plan for the management of selenium; and, support development of recommendations for selenium site-specific objectives for the watershed that would supplant the CTR criteria.

- Order No. R8-2004-0021 included requirements based on the NSMP Work Plan approach. The five-year Work Plan was approved and, with significant commitments of NSMP Working Group resources, has been implemented. The tasks completed include the evaluation of potential selenium treatment technologies, including pilot, demonstration-scale testing of selected technologies, the development of recommendations for site-specific objectives for selenium for the Newport Bay watershed, and recommendations for a selenium management strategy that could be incorporated in the revised TMDL implementation plan.
- As part of a permit streamlining effort, the Regional Board adopted Order No. R8-2007-0041 on November 20, 2007. Order No. R8-2007-0041 replaced Order No. R8-2004-0021, and Order No. R8-2004-0021 has been rescinded. Order No. R8-2007-0041 expired on November 1, 2012 but was administratively extended.
- Like Order No. R8-2004-0021, Order No. R8-2007-0041 regulates groundwater-related discharges and also includes requirements for discharges from groundwater cleanup operations in the Newport Bay watershed. Order No. R8-2007-0041 includes the same requirements for selenium as specified in Order No. R8-2004-0021 and continues to require compliance with selenium limitations as soon as possible but no later than December 20, 2009.
- On December 10, 2009, the Regional Board approved Time Schedule Order (TSO) No. R8-2009-0069 for dischargers enrolled in Order No. R8-2007-0041. TSO No. R8-2009-0069 extended the schedule for compliance with selenium effluent limitations specified in Order No. R8-2007-0041 from December 20, 2009 to no later than December 10, 2014. As issued on December 10, 2009, the TSO remains in effect for a maximum of five years (i.e., December 10, 2014) or until such time as Order No. R8-2007-0041 is re-issued to incorporate revised selenium effluent limitations and other requirements necessary to implement Regional Board approved selenium Total Maximum Daily Loads (TMDLs).
- The TSO required dischargers regulated under Order No. R8-2007-0041 to participate in the NSMP and to participate in the completion of specific selenium-related tasks identified by the NSMP Working Group. These tasks included the submittal of a proposed Method of Compliance Workplan/Schedule, or "BMP Strategic Plan", and a proposed regional monitoring program (RMP). The TSO required that the BMP Strategic Plan and RMP be implemented within 90 days of Regional Board approval. Both the BMP Strategic Plan and RMP were approved on December 5, 2013 and are being implemented.

- The approved BMP Strategic Plan includes selenium reduction projects (Cienega Demonstration Project, the Peters Canyon Wash Pipeline Project, the Santa Ana-Delhi Channel Diversion Project), continued evaluation of potential selenium treatment technologies, and adaptive management of selenium control implementation based on the results of monitoring of BMP efficacy and the effects of selenium control implementation on the receiving waters.

## Discussion

The Regional Board found issuance of TSO No. R8-2009-0069 appropriate and necessary in light of the extraordinary complexity of the selenium problem in the Newport Bay watershed, the lack of a readily available, conventional selenium treatment technology that could be implemented in a reasonably practicable manner so as to achieve compliance with selenium effluent limitations, and the significant commitments by the members of the NSMP Working Group to assess and achieve selenium standards and effluent limitations.

In issuing the TSO, the Regional Board also recognized that implementation of the tasks specified in the TSO would support ongoing Regional Board staff efforts to develop revised selenium TMDLs and site-specific objectives (SSOs) for the Newport Bay watershed, and that those TMDLs/SSOs would, when approved, serve as the basis for appropriate revisions to the selenium limitations and schedule for compliance with those limitations that are specified in Order No. R8-2007-0041. The Regional Board anticipated that the revised TMDLs/SSOs would be recommended for approval in 2010 and that final approval by all requisite agencies would occur in a subsequent one to two year period. The Regional Board found that issuance of the TSO would provide appropriate compliance schedule relief until such time as the TMDLs/SSOs could be fully approved and appropriate permit revisions could be made, and further, that such an approach would be a prudent use of the Regional Board's permit issuance resources.

While significant effort and progress to address selenium in the Newport Bay watershed has been and continues to be made, the TMDL/SSO adoption process has been delayed. In fact, in light of anticipated difficulty in the approval of selenium SSOs, and in the interest of establishing TMDLs that can serve as the basis of permit revisions in a more timely manner, Regional Board staff, in collaboration with the NSMP Working Group and other stakeholders, is now pursuing selenium SSOs on a parallel but separate path from the TMDLs. It is now anticipated that selenium TMDLs will be recommended for Regional Board approval by the end of 2014. It is expected that the selenium SSO recommendations will follow shortly thereafter. It should be noted that the recommended TMDLs will take the likely SSO recommendations into account.

Meanwhile, the NSMP Working Group and other stakeholders in the Newport watershed continue to conduct technical investigations to support TMDL and SSO development, to evaluate potential selenium treatment technologies, and to identify and implement



measures to control selenium inputs to surface waters in the Newport watershed. As stated above, these actions are part of the approved BMP Strategic Plan required by the TSO. In particular, certain stakeholders have implemented or are in the process of implementing significant selenium (and nitrogen) reduction projects. These include ongoing operation of the Cienega Demonstration Project (a selenium and nitrogen treatment project), the Peters Canyon Wash Diversion Project, and the Santa Ana-Delhi Channel Diversion Project. Upon implementation of these diversion projects, dry weather flows containing significant selenium (and nitrogen) loads will be diverted from these channels to the Orange County Sanitation District sewer system.

In light of the unanticipated delay in the development and approval of selenium TMDLs for the Newport Bay watershed, the continuing lack of practicable selenium treatment technology (despite intensive efforts to identify and evaluate such technology) and the ongoing and very significant commitments by NSMP Working Group members to implement selenium reduction projects that will result in substantial selenium (and nitrogen) reductions in advance of TMDL approval, Regional Board staff recommends that TSO No. R8-2009-0069 be amended to further extend the date for compliance with the selenium effluent limitations. Specifically, Regional Board staff recommends that the TSO be amended to remain effective for a maximum of five years beyond the current expiration date, or December 10, 2019, or until Order No. 2007-0041 is re-issued to incorporate revised selenium effluent limitations and other requirements that are consistent with approved selenium TMDLs. As stated above, it is anticipated that selenium TMDLs that would replace those promulgated by USEPA in 2002 will be recommended for Regional Board adoption by the end of 2014. Regional Board staff intends to work closely with State Water Board, USEPA and other agency staff to assure that the recommended TMDLs will be approvable. The requisite approval process subsequent to Regional Board action is expected to take one to two years.

Once the TMDLs have been approved, appropriate revisions to the requirements in Order No. R8-2007-0041, including a compliance schedule based on that identified in the approved TMDL, will be recommended for Regional Board consideration. Extending the TSO would obviate the need for more immediate action on Order No. R8-2007-0041 and thus conserve the Board's limited permit issuance resources until they would be most effectively utilized.

California Water Code (CWC) Section 13385(j)(3)(C)(ii)(II) provides that following a public hearing, and upon a showing that the discharger is making diligent progress towards bringing the waste discharge into compliance with the effluent limitation, the regional board may extend the time schedule specified in a time schedule order issued to that discharger for an additional period not exceeding five years, if the discharger demonstrates that the additional time is necessary to comply with the effluent limitation.

As described above, the dischargers enrolled in Order No. R8-2007-0041 are making diligent progress toward bringing waste discharges into compliance with selenium effluent limitations and have demonstrated that additional time is necessary to achieve

that compliance. Therefore, per CWC section 13385(j)(3)(C)(ii)(II), it is appropriate to extend the TSO by no more than five years. No other changes to the TSO are necessary.

### **RECOMMENDATION**

Adopt Order No. R8-2013-0060, amending Time Schedule Order No. R8-2009-0069 as presented.

Attachment: Staff report for TSO No. 2009-0069 (December 10, 2009)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SANTA ANA REGION

ORDER NO. R8-2013-0060  
AMENDING TIME SCHEDULE ORDER NO. R8-2009-0069

For

DISCHARGERS ENROLLED IN ORDER NO. R8 -2007-0041, NPDES NO. CAG918002, GENERAL DISCHARGE PERMIT FOR DISCHARGES TO SURFACE WATERS OF GROUNDWATER RESULTING FROM GROUNDWATER DEWATERING OPERATIONS AND/OR GROUNDWATER CLEANUP ACTIVITIES AT SITES WITHIN THE SAN DIEGO CREEK/NEWPORT BAY WATERSHED POLLUTED BY PETROLEUM HYDROCARBONS, SOLVENTS, METALS AND/OR SALTS.

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Board) finds that:

1. On December 10, 2009, the Board adopted Time Schedule Order (TSO) No. R8-2009-0069 for dischargers enrolled in Order No. R8-2007-0041, NPDES No. CAG918002, General Discharge Permit for Discharges to Surface Waters of Groundwater Resulting from Groundwater Dewatering Operations and/or Groundwater Cleanup Activities at Sites within the San Diego Creek/Newport Bay Watershed Polluted by Petroleum Hydrocarbons, Solvents, Metals and/or Salts. Order No. R8-2007-0041 expired on November 1, 2012 but was administratively extended.
2. TSO No. R8-2009-0069 (the TSO) extended the schedule for final compliance with the effluent limitations for selenium specified in Order No. R8-2007-0041 for a maximum of five years from the date of adoption of the TSO, or no later than December 10, 2014. The compliance date for these limitations specified in Order No. 2007-0041 was no later than December 20, 2009.
3. Issuance of the TSO was appropriate and necessary given the extraordinary challenge of controlling sources of selenium in the Newport Bay watershed and the lack of a readily available conventional treatment technology that could be implemented in a reasonably practicable manner so as to achieve immediate compliance with selenium effluent limitations.
4. The TSO established interim requirements, including the requirement that the dischargers enrolled in Order No. R8-2007-0041 ("Dischargers") shall elect to participate in the Nitrogen and Selenium Management Program (NSMP) and thereby fulfill a schedule of specific tasks submitted by the NSMP Working Group. This schedule of tasks is identified in the TSO.

5. Dischargers enrolled in the TSO have complied with the TSO by participation in the NSMP and the completion of the tasks identified by the NSMP Working Group and specified in the TSO. The tasks included the submittal of a proposed Method of Compliance Workplan/Schedule, or "BMP Strategic Plan"<sup>1</sup>, and a proposed regional monitoring program (RMP) for selenium. TSO No. R8-2009-0069 requires that both the BMP Strategic Plan and the Regional Monitoring Program be implemented by the NSMP Working Group within 90 days of their approval by the Regional Board.
6. A draft BMP Strategic Plan was submitted on January 1, 2011. A draft Regional Monitoring Program was submitted on January 3, 2011. These proposed plans were subsequently revised based on comments from Regional Board staff and re-submitted. The revised BMP Strategic Plan, dated September 27, 2013, includes a revised Regional Monitoring Program. The revised Plan, including the RMP, was submitted on October 10, 2013. The revised Plan, including the RMP, was further revised and re-submitted on December 4, 2013. Both plans were approved by the Regional Board's Executive Officer on December 5, 2013.
7. The approved BMP Strategic Plan identifies a three-phase approach to achieve compliance with selenium effluent limitations specified for the groundwater-related discharges regulated under Order No. R8-2007-0041 (and for groundwater dewatering discharges by the City of Irvine that are regulated under Order No. R8-2005-0079). The Strategic Plan includes selenium reduction projects, including the Cienega Field Demonstration Project, the Peters Canyon Wash Pipeline Project and the Santa Ana-Delhi Channel Diversion Project. The Cienega Field Demonstration Project is already in operation, while significant progress to implement the other selenium reduction projects within the next five years is being made by members of the NSMP Working Group and other dischargers. The approved BMP Strategic Plan also includes continued evaluation of potential selenium treatment technologies and adaptive management of selenium control implementation based on the results of monitoring of BMP efficacy and the effects of selenium control implementation on the receiving waters. The Strategic Plan also includes commitments to participate with the Regional Board in the development of selenium site-specific objectives and

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<sup>1</sup> The NSMP was formed in response to the adoption of Order No. R8-2004-0021, NPDES No. CAG998002, General Waste Discharge Requirements for Short-Term Groundwater-Related Discharge and De Minimus Wastewater Discharges to Surface Waters within the San Diego Creek/Newport Bay Watershed. Order No. R8-2004-0021 specified selenium limitations for these discharges for the first time. Because no conventional treatment technology was available to achieve immediate compliance with these limitations, Order No. R8-2004-0021 specified a schedule of compliance for these limitations. Responsible parties formed the NSMP Working Group to develop and implement a 5-year workplan designed, in part, to evaluate, develop and make recommendations for the implementation of selenium treatment technologies and other control measures that would enable compliance and achieve applicable water quality standards. As part of the implementation of this 5-year workplan, the NSMP Working Group developed and proposed a BMP Strategic Plan. This proposed Plan is distinct from the BMP Strategic Plan required under the TSO, although it formed the substantive basis for and includes many of the same elements as the Plan required and later submitted under the TSO.

revised selenium TMDLs for the Newport Bay watershed that would supplant the selenium TMDLs promulgated by the U.S. Environmental Protection Agency in 2002.

8. In addition to the development of the draft BMP Strategic Plans and RMPs and significant, costly and complicated multi-agency efforts to implement the Peters Canyon Wash Pipeline Project and other selenium reduction projects, the NSMP Working Group has been actively engaged in selenium-related technical and scientific investigations in the Newport Bay watershed. The intent of these investigations is to support Regional Board staff work to develop revised selenium TMDLs for the Newport Bay watershed. In addition, the investigations are intended to support recommendations for site-specific objectives for selenium for this watershed.
9. The selenium reduction projects that are included in the approved BMP Strategic Plan are expected to remove certain point source selenium discharges to surface waters, including discharges by the City of Irvine (certain groundwater dewatering discharges) and Caltrans (Groundwater Dewatering Facility). In addition, the projects will intercept and divert to the Orange County Sanitation District sewer system diffuse rising/seeping groundwater that contains selenium and that otherwise enters the surface water system. These diffuse groundwater discharges are not presently regulated. Selenium reductions as the result of the diversion projects are expected to be significantly greater than the sum of all remaining selenium loads from other point source dewatering and groundwater cleanup discharges during dry weather.
10. As such, the projects are expected to contribute significantly to the selenium reductions anticipated to be required by the revised selenium TMDLs, and the reductions may or will likely be achieved before the revised selenium TMDLs are approved and become effective for regulatory purposes. The diversion projects are also expected to result in significant reductions in nitrogen discharges to surface waters and thereby contribute to compliance with the Nutrient TMDL established for the San Diego Creek/Newport Bay watershed in 1998.
11. When the TSO was adopted on December 10, 2009, the Board anticipated that revised selenium TMDLs would be considered by the Regional Board in early 2010 and that subsequent, requisite approval of the TMDLs by the State Water Board, Office of Administrative Law and USEPA would follow thereafter in a timely manner. The approval process by these other agencies was anticipated to require at least one and more likely two years. It was recognized that upon final approval, the new TMDLs would be used as the basis for modifications to Order No. R8-2007-0041, including revised selenium effluent limitations and schedules for compliance with these limitations. Order No. R8-2007-0041 was administratively extended, rather than revised and re-issued upon its expiration, given these circumstances and to conserve Regional Board staff resources.

12. Pursuant to the terms of the TSO, the TSO remains in effect for a maximum of five years from its effective date, or December 10, 2014, or until such time as Order No. R8-2007-0041 is re-issued or amended to incorporate revised selenium effluent limitations and/or receiving water limitations that are consistent with the assumptions and requirements of the wasteload allocations contained in Board-approved TMDLs.
13. While, as described in the preceding findings, significant efforts have been and continue to be made by the Dischargers and other members of the NSMP Working Group to develop revised TMDLs and to identify and implement selenium reductions to achieve compliance with selenium effluent limitations, it is recognized that substantive additional work is necessary to achieve these goals. It is anticipated that revised TMDLs will be recommended for adoption by the Regional Board by the end of 2014. A one to two year period thereafter is expected to be necessary to obtain all requisite agency approvals, whereupon the TMDLs would become effective and serve as the basis for revisions to Order No. R8-2007-0041.
14. Concurrent with work to develop and pursue approval of the revised TMDLs, the Dischargers, with other members of the NSMP Working Group, are required to implement the approved BMP Strategic Plan (dated December 4, 2013). This is expected to result in significant reductions in selenium discharges in the Newport Bay watershed, even though specific wasteload and load allocations applicable to these discharges will not become effective for regulatory purposes until the TMDLs receive all requisite approvals.
15. California Water Code (CWC) Section 13385(j)(3)(C)(ii)(II) provides that following a public hearing, and upon a showing that the discharger is making diligent progress towards bringing the waste discharge into compliance with the effluent limitation, the regional board may extend the time schedule specified in a time schedule order issued to that discharger for an additional period not exceeding five years, if the discharger demonstrates that the additional time is necessary to comply with the effluent limitation.
16. As described in the preceding findings, the Dischargers are making diligent progress toward bringing waste discharges into compliance with selenium effluent limitations and have demonstrated that additional time is necessary to achieve that compliance. Per CWC section 13385(j)(3)(C)(ii)(II), it is appropriate to extend the TSO by no more than two years, i.e., to no later than December 10, 2016. The extension will allow the completion of work necessary to complete revised selenium TMDLs and to re-issue Order No. R8-2007-0041 to incorporate revised effluent limitations and other requirements necessary to implement the new TMDLs. No other changes to the TSO are necessary.
17. Issuance of this amendment to the TSO is exempt from the provision of the California Environmental Quality Act (Public Resources Code, Section 21000, *et*

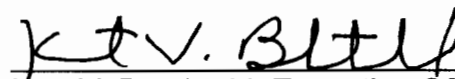
seq.), in accordance with Section 15321(a)(2), Title 14, California Code of Regulations.

18. Any person adversely affected by this action of the Regional Water Board may petition the State Water Board to review the action. The petition must be received by the State Water Board Office of the Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request. Information regarding the petition process may also be found at the State Water Board website:  
[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/index.shtml](http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml).

**IT IS HEREBY ORDERED THAT:**

1. Time Schedule Order No. R8-2009-0069 shall be extended for up to an additional two years, as set forth in Attachment 1, which includes the following amendment:  
  
"7. This Order, as amended by Order No. R8-2013-0060 on December 6, 2013, shall remain in effect for a maximum of two years from its current expiration date, or until December 10, 2016, or until such time as Order No. R8-2007-0041 is re-issued to incorporate revised selenium effluent limitations and other requirements necessary to implement Board approved selenium TMDLs."
2. All other terms and conditions of Time Schedule Order No. R8-2009-0069, as amended, remain in full force and effect.

This Order is effective upon the date of signature.

  
Kurt V. Berchtold, Executive Officer

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December 6, 2013

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SANTA ANA REGION

TIME SCHEDULE ORDER NO. R8-2009-0069

For

DISCHARGERS ENROLLED UNDER ORDER NO. R8-2007-0041, NPDES NO. CAG918002,  
GENERAL DISCHARGE PERMIT FOR DISCHARGES TO SURFACE WATERS OF  
GROUNDWATER RESULTING FROM GROUNDWATER DEWATERING OPERATIONS  
AND/OR GROUNDWATER CLEANUP ACTIVITIES AT SITES WITHIN THE SAN DIEGO  
CREEK/NEWPORT BAY WATERSHED POLLUTED BY PETROLEUM HYDROCARBONS,  
SOLVENTS, METALS AND/OR SALTS

As amended by Order No. R8-2013-0060 on December 6, 2013

The California Regional Water Quality Control Board, Santa Ana Region (Regional Water Board), finds that:

1. In May 2000, the United States Environmental Protection Agency (USEPA) promulgated what is known as the California Toxics Rule (CTR), which consists of numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California (State). (See 40 C.F.R. 131.38.) USEPA promulgated the CTR based on a determination that the numeric criteria are necessary to protect human health and the environment. The CTR contains a numeric chronic aquatic life criterion for selenium in freshwater of 5 micrograms per liter (5 µg/L), as total recoverable selenium, and in saltwater of 71 µg/L, as total dissolved selenium. (40 C.F.R. 131.38(b)(1).)
2. The CTR provides the State with discretion in how to implement the relevant criteria. Accordingly, in March 2000, the State Water Resources Control Board ("State Water Board") adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The State Water Board amended the SIP in February 2005 with Resolution No. 2005-0019. USEPA has approved the SIP for use as the State's implementation plan for CTR constituents.
3. On June 14, 2002, USEPA promulgated Total Maximum Daily Loads (TMDLs) for Toxic Pollutants in San Diego Creek and Newport Bay. TMDLs were established for organochlorine compounds, organophosphate pesticides, metals (chromium, cadmium, mercury, copper, lead and zinc) and selenium.
4. The USEPA TMDLs established waste load allocations (WLAs) for discharges of groundwater to surface water for selenium based on the CTR chronic criteria for selenium in freshwater and saltwater. However, USEPA's TMDLs are not self-executing, contain no implementation plan, and have not been incorporated into the Basin Plan for the Santa Ana Region. Neither the State nor Regional Water Board has developed an implementation plan for the USEPA TMDLs.



5. On December 20, 2004, the Regional Water Board adopted General Waste Discharge Requirements for Short-Term Groundwater-Related Discharges and De Minimis Wastewater Discharges to Surface Waters within the San Diego Creek/Newport Bay Watershed, Order No. R8-2004-0021, NPDES No. CAG998002. Pursuant to the SIP, the Regional Water Board incorporated numeric selenium effluent limits based on the CTR chronic freshwater and saltwater aquatic life criteria into Order No. R8-2004-0021, with a compliance schedule requiring compliance with the final effluent limits to be achieved no later than December 20, 2009. As interim compliance measures, Order No. R8-2004-0021 allowed for compliance with the selenium effluent limitations through either an approved offset program or participation in the Nitrogen and Selenium Management Program [NSMP] prior to the December 20, 2009 date.
6. On October 13, 2006, the Regional Water Board adopted Order No. R8-2006-0065, which amended the type and nature of discharges authorized under Order No. R8-2004-0021.
7. On November 30, 2007, the Regional Water Board adopted Order No. R8-2007-0041, NPDES No. CAG918002. Order No. R8-2007-0041 is a general permit that regulates discharges of treated wastewater from groundwater dewatering and/or groundwater remediation activities at sites polluted by petroleum hydrocarbons, solvents, metals and/or salts within the San Diego Creek/Newport Bay watershed. Consistent with Order No. R8-2004-0021, Order No. R8-2007-0041 required compliance with final effluent limits based on the CTR chronic criteria for selenium by no later than December 20, 2009. Order No. R8-2007-0041 has replaced Order No. R8-2004-0021, and Order No. R8-2004-0021 has been rescinded.
8. Order No. R8-2007-0041 was later amended by Order No. R8-2009-0045, which was adopted by the Regional Water Board on July 20, 2009. Order No. R8-2009-0045 amended Order No. R8-2007-0041 by expanding and clarifying the nature of the discharges allowed under Order No. R8-2007-0041.
9. As of the date of this Order, the following entities are enrollees under Order No. R8-2007-0041 ("Existing Dischargers"):

| <u>Enrollees</u>                      | <u>Facility</u>                   | <u>Effective Date</u> |
|---------------------------------------|-----------------------------------|-----------------------|
| Ca Dept of Transportation District 12 | Dewatering-Irvine-Various-Newport | 6/14/2005             |
| Irvine Company                        | Dewatering, General               | 12/20/2004            |
| Newport Beach City                    | Dewatering, General               | 9/24/1998             |
| FOOTHILL ENG & DEWATERING, INC        | Dewatering, Various, Newport Bay  | 11/8/2002             |
| Irvine Ranch Water District           | Dewatering, Irvine                | 4/20/2005             |
| Golden State Water Company - Anaheim  | Dewatering, Various               | 4/7/2005              |
| Orange Cnty Flood Control Dist        | Dewatering, Irvine-Newport Bay    | 2/24/2005             |
| Costa Mesa City                       | Dewatering, C.M.-Newport Bay      | 3/28/2005             |

|                              |  |            |
|------------------------------|--|------------|
| Tustin City                  | Dewatering, Newport Bay  | 3/28/2005  |
| Laguna Hills City            | Dewatering, Laguna Hills,<br>Newport                                 | 3/28/2005  |
| Lake Forest City             | Dewatering, Lake Forest,<br>Newport                                  | 3/28/2005  |
| Santa Ana City PWD           | Dewatering, Santa Ana City   | 2/24/2006  |
| Mariners Mile Gateway<br>LLC | Potable Water System<br>GW Cleanup-Newport Beach,<br>Orange          | 10/26/2006 |
| Integral Communities I Inc   | GW Cleanup, Sandpoint, Santa<br>Ana                                  | 2/27/2008  |
| Irvine City                  | Lane Channel -Irvine   | 1/11/2008  |
| G & M Oil Company Inc        | GW Cleanup-C.M., Bristol #21<br>Newport Marina/Bridgeport<br>Project | 2/5/2008   |
| ETCO Investment              |  | 9/11/2008  |

Entities that enroll under Order No. R8-2007-0041 after the effective date of this Order are referred to as "Future Dischargers." Any entity that enrolls under Order No. R8-2007-0041 is a "Discharger." Although listed above as an Existing Discharger, the City of Irvine, and potentially others, is not presently discharging under Order No. R8-2007-0041 and the City of Irvine has no present intention of discharging thereunder for the foreseeable future.

10. Section V.A.1.a of Order No. R8-2007-0041 contains final effluent limitations based on CTR criteria for total recoverable selenium for discharges to San Diego Creek and its tributaries at the following levels: (1) the maximum daily concentration limit ( $\mu\text{g/L}$ ) is 8.2; and (2) the average monthly concentration limit ( $\mu\text{g/L}$ ) is 4.1.
11. Section V.A.1.a of Order No. R8-2007-0041 contains final effluent limitations based on CTR criteria for total recoverable selenium for discharges to Upper and Lower Newport Bay at the following levels: (1) the maximum daily concentration limit ( $\mu\text{g/L}$ ) is 116; and (2) the average monthly concentration limit ( $\mu\text{g/L}$ ) is 58.
12. Section V.A.1.b of Order No. R8-2007-0041 provides that compliance with the selenium effluent limitations specified in Section V.A.1.a shall be achieved as soon as possible but no later than December 20, 2009.
13. In response to Order No. R8-2004-0021, many of the San Diego Creek/Newport Bay watershed stakeholders/dischargers established a Nitrogen and Selenium Management Program (NSMP) Working Group. The NSMP Working Group includes representatives from local governments and agencies, developers and other private entities, water districts, State agencies including the Regional Water Board, and environmental groups.
14. Order No. R8-2004-0021 required the NSMP Working Group to develop a work plan to assist in identifying a comprehensive management plan for selenium and nitrogen and, in particular, to identify an approach to address rising groundwater, the largest source of selenium in the watershed. The NSMP Work Plan and

Compliance Strategy (Work Plan) was approved by the Executive Officer of the Regional Water Board in July 2005. The Working Group has been implementing the approved Work Plan since July 2005.

15. The NSMP Work Plan included a number of selenium-related tasks, including the development of a conceptual model for selenium, an evaluation of selenium sources and loads, an assessment of the bioavailability and impacts of selenium on beneficial uses in the watershed, an evaluation of selenium speciation analytical methods, an evaluation and selection of potentially viable Best Management Practices (BMPs) and treatment technologies for selenium, pilot testing of the most promising BMPs/treatment technologies, and, if necessary and/or appropriate, the development of site-specific objectives (SSOs) for selenium.
16. Controlling sources of selenium in the Newport Bay watershed poses extraordinary challenges given the watershed-wide scale of the selenium problem, its diffuse origin (largely rising groundwater) and the limited land available for placement of treatment facilities and BMPs because of the high degree of urbanization in the watershed. In addition, there is currently no readily available, conventional treatment technology that can be implemented in a reasonably practicable manner for point source discharges. In the Newport Bay watershed, approximately 85% of the existing selenium loads in surface waters originates from groundwater, and much of this load (about 78%) results from diffuse rising groundwater, which enters surface waters via springs and seeps in the unlined portions of the channels, and cracks and weepholes in storm drains and the concrete-lined portions of the channels. Discrete, groundwater-related discharges (e.g., groundwater dewatering and cleanup) and other regulated discharges (e.g., urban runoff) account for a relatively small part of the selenium load to surface waters. Therefore, selenium reductions needed to protect beneficial uses are best achieved on a regional, watershed-wide scale, addressing both non-point and point sources.
17. At this time, Regional Water Board staff, in collaboration with the NSMP Working Group, is developing TMDLs and SSOs for selenium in the Newport Bay watershed<sup>1</sup> to be presented for consideration by the Regional Water Board in early 2010 (the "Board TMDLs/SSOs"). Once approved, the SSOs will replace the CTR criteria for the relevant water bodies. As currently designed, implementation of the

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<sup>1</sup> The Newport Bay watershed encompasses both upper and lower Newport Bay and its tributaries, San Diego Creek, Santa Ana Delhi, and Big Canyon subwatersheds, and the Costa Mesa and Santa Isabel channels. To date, NPDES permits, TMDLs and amendments to the Basin Plan for the Santa Ana Region have referred to the watershed as the "San Diego Creek/Newport Bay" watershed. However, the County of Orange recently performed a comprehensive evaluation of all the watersheds located within their boundaries with the intent of verifying watershed divisions and nomenclature. The County decided that the San Diego Creek/Newport Bay watershed would simply be referred to as the Newport Bay watershed. All of the County programs, including the NPDES program, and all County documents now refer to the Newport Bay watershed. For consistency with the new nomenclature, these TMDLs/SSOs will also refer to the watershed as the Newport Bay watershed. Similarly, future NPDES permits will employ this nomenclature.

Board TMDLs/SSOs will involve a collaborative watershed-based approach coordinated by and through the NSMP Working Group.

18. Through development of the Board TMDLs/SSOs and the NSMP, considerable new information has been, and continues to be, developed, including scientific and technical information related to the sources of selenium and its potential adverse impacts on beneficial uses in the Newport Bay watershed. This information was not available at the time Order No. R8-2004-0021 was issued, and much of it has been developed since Order No. R8-2007-0041 was issued. This new information indicates that the final CTR-based effluent limitations may not adequately protect beneficial uses within the Newport Bay watershed. Upon final approval of the Board TMDLs/SSOs, Order No. R8-2007-0041 will be revised to incorporate revised selenium effluent limitations and/or receiving water limitations consistent with the assumptions and requirements of the WLAs contained in the Board TMDLs/SSOs, and this Order will be rescinded. These revised limitations will be (and the interim limitations in this Order are) consistent with anti-backsliding requirements of the Clean Water Act.
19. Given the complexity of the selenium problem and the limited practicable treatment technologies, a collaborative watershed-based approach to reducing selenium provides the best opportunity to achieve water quality objectives for selenium and to assure the protection of beneficial uses. Accordingly, to the extent they seek coverage, this Order requires participation in the NSMP by Dischargers to ensure that waste discharges containing selenium are brought into compliance with the CTR-based selenium effluent limitations in as short of a time period as possible. The NSMP has been structured to allow participation by all dischargers (short- and long-term, current and future) enrolled under Order No. R8-2007-0041.
20. Dischargers who do not seek coverage under this Order shall comply with the final CTR-based effluent limitations for selenium no later than December 20, 2009, as provided in Order No. 2007-0041.
21. The following is a schedule of tasks submitted by the NSMP Working Group that will be completed within the next five years.

| Task No. | Description of Activity  | Compliance Date   |
|----------|--|---|
| 1.       | Discharger to elect to participate in the Nitrogen and Selenium Management Program (NSMP). (The Discharger's participation in the NSMP will be deemed to fulfill the general requirements outlined below that are not particular discharger tasks, so long as the discharger remains in material compliance with the terms of an executed NSMP Cooperative Watershed Program Funding Agreement.)   | By the later of December 20, 2009 or the commencement of any discharge under Order No. R8-2007-0041.  |
| 2.       | NSMP Working Group to develop and submit a Funding Agreement, including funding for offset, mitigation or trading provisions, to provide a consistent source of funding to address point source and nonpoint source discharges of selenium and nitrogen within the watershed.  |   |
|          | a. Submit Funding Agreement and then current list of Dischargers participating therein to Regional Water Board<br><br>b. Execute Funding Agreement   | a. July 1, 2010<br><br>b. Participating dischargers seeking coverage under this TSO to execute Funding Agreement within 180 days of the participating Discharger's approval of the terms of the submitted Funding Agreement |
| 3.       | All dischargers are required to submit documentation with their notice of intent (NOI) to discharge that the feasibility of eliminating or reducing the volume of the discharge has been evaluated. The feasibility evaluation options will consist of (1) discharge to land; (2) discharge to sewer; and (3) offsite transport and disposal. Specifications and limitations of the three methods were listed in the NSMP report <i>Volume Reducing Best Management Practices for Short-Term Groundwater Related Discharges within Orange County – August 2005</i> | Ongoing   |
| 4.       | NSMP Working Group to develop Method of Compliance Workplan/Schedule (BMP Strategic Plan)  |   |

| Task No.  | Description of Activity   | Compliance Date  |
|-----------|---|--|
|           | <p>a. A proposed BMP Strategic Plan and BMP Effectiveness Monitoring Plan will be developed by the NSMP Working Group for submittal to the Regional Water Board.</p> <p>The BMP Strategic Plan is to include the following elements:</p> <ol style="list-style-type: none"> <li>1. A description of an approach to implement pollution prevention, source control and treatment control BMPs to meet TMDL targets for selenium;</li> <li>2. Identification of BMP implementation priority areas that consider the level of biological significance and selenium concerns;</li> <li>3. Identification of candidate source and/or treatment controls believed important to meet operative TMDL targets, including:                             <ol style="list-style-type: none"> <li>a. type and approximate locations of controls;</li> <li>b. timing for implementation;</li> <li>c. treatment capacity;</li> <li>d. cost of implementation; and</li> <li>e. anticipated removal rates and/or load reductions</li> </ol> </li> <li>4. Early Action Tasks anticipated to be completed within 5 years from the date of this Order may include:                             <ol style="list-style-type: none"> <li>a. type and approximate locations of controls;</li> <li>b. timing for implementation;</li> <li>c. treatment capacity;</li> <li>d. anticipated removal rates and/or load reductions; and</li> <li>e. study goals and relevance to future projects</li> </ol> </li> <li>5. A BMP Effectiveness Monitoring Program;</li> <li>6. Milestones for Plan review, progress assessment and final selection of source and/or technology controls;</li> <li>7. Final Control Technology Implementation Outline (Phase II)</li> </ol> | <p>a. January 1, 2011</p>  |
|           | <p>b. NSMP Working Group to commence implementation of BMP Strategic Plan</p>   | <p>b. Within 90 days of Regional Water Board approval.</p>                   |
|           | <p>c. NSMP Working Group to submit Annual BMP Strategic Plan implementation progress reports with corresponding decision tree schedule dependent on implementation success and subsequent development of selenium reduction technologies with the goal of implementing BMPs which are reasonably feasible to implement and which have been proven to be effective.</p>  | <p>c. Annually after Regional Water Board Approval of BMP Strategic Plan</p> |
| <p>5.</p> | <p><b>Irrigation Reduction and Control Program</b><br/>                     Municipal dischargers seeking coverage under this TSO shall adopt an updated Model Water Efficient Landscape Ordinance (A.B. 1881) or one that is "at least as effective as" that Ordinance.</p>  | <p>By the later of January 1, 2010 or as required by A.B 1881.</p>           |
| <p>6.</p> | <p>NSMP Working Group to submit and implement Regional Monitoring Program as follows:</p>   |  |

| <b>Task No.</b> | <b>Description of Activity</b>   | <b>Compliance Date</b>                                    |
|-----------------|--|---|
|                 | a. Regional monitoring program (RMP) for selenium to be submitted to Regional Water Board for approval | a. January 1, 2011  |
|                 | b. Commence implementation of monitoring program   | b. Within 90 days of Regional Water Board approval of RMP |
|                 | c. Submit annual monitoring reports  | c. Annually after Regional Water Board Approval of RMP    |

The NSMP Working Group will submit to the Regional Water Board on or before each compliance date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance will be stated, and will include an estimate of the date when the NSMP will be in compliance. The NSMP will notify the Regional Water Board by letter when it returns to compliance with the time schedule.

22. Enrollment and participation in the NSMP Working Group has been established for Existing Dischargers pursuant to their execution of the NSMP Memorandum of Procedure, or pursuant to their execution and Working Group approval of the First Amendment to Memorandum of Procedure. Future Dischargers wishing to enroll and participate in the NSMP Working Group shall establish their enrollment and participation by execution of a duly approved future amendment to the Memorandum of Procedure as amended by the First Amendment of Procedure.
23. This Order provides interim selenium effluent limitations in lieu of the effluent limitations set forth in Order No. R8-2007-0041. Without these interim limitations, Dischargers' waste discharges after December 20, 2009 threaten to exceed the effluent limitations set forth in Findings 10 and 11 of this Order and, thus, threaten to violate Order No. R8-2007-0041.
24. California Water Code (CWC) section 13300 states: "Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to

correct or prevent a violation of requirements.”

25. This Order is issued in accordance with CWC section 13300 and establishes a time schedule for compliance.
26. In accordance with CWC section 13385(j)(3), the Regional Water Board finds that each Discharger may not be able to consistently comply with the final effluent limitations for selenium set forth in Order No. R8-2007-0041. These limitations are new requirements that became applicable to Order No. R8-2007-0041 after the effective date of adoption of the waste discharge requirements, and after July 1, 2000, for which new or modified control measures are necessary in order to comply with the limitations, and the new or modified control measures cannot be designed, tested, installed, and put into operation within 30 calendar days.
27. This Order also applies to Future Dischargers (to the extent they seek coverage hereunder) because in many, if not all cases, they contemplated their discharges at a time when the final effluent limitations for selenium as set forth in Order No. R8-2007-0041 were not yet effective.
28. CWC section 13385(h) and (i) require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. However, CWC section 13385(j) exempts certain violations from the mandatory minimum penalties. CWC section 13385(j)(3) exempts a discharge from mandatory minimum penalties “where the waste discharge is in compliance with either a cease and desist order issued pursuant to CWC section 13301 or a time schedule order issued pursuant to CWC section 13300, if all the [specified] requirements are met.”
29. Compliance with this Order exempts the Dischargers from mandatory penalties for violations of the effluent limitation for Total Recoverable Selenium, as set forth in section V.A.1.a of Order No. R8-2007-0041 in accordance with CWC section 13385(j)(3).
30. CWC section 13385(j)(3)(A) requires this Order to specify the actions that the Discharger is required to take in order to correct the potential violations that would otherwise be subject to mandatory minimum penalties. This Order requires the Dischargers to develop and implement new or modified control measures designed to achieve compliance with the effluent limitations as set forth in Findings 10 and 11 of this Order.
31. CWC section 13385(j)(3)(D) requires the preparation and implementation of a pollution prevention plan pursuant to CWC section 13263.3. In order to obtain authorization under Order No. 2007-0041, Dischargers are required to demonstrate that they have documented and made all practicable attempts to avoid, reduce or eliminate the discharge of selenium. The reduction/elimination of



selenium discharges may be accomplished through volume reduction, including sewerage. Potential volume reduction measures were evaluated by the NSMP Working Group and three volume reduction BMPs, including sewerage, were deemed feasible. Selenium occurs in the groundwater-related discharges regulated under Order No. 2007-0041 as the result of additions from natural processes not subject to the control of the Dischargers. Therefore, with respect to the selenium discharges addressed by Order No. 2007-0041, the evaluation and implementation of reasonably feasible discharge volume reduction measures, and the evaluation of and adherence to project design features or other practices that result in discharge avoidance fulfill the requirements of a Pollution Prevention Plan.

32. The interim effluent limitations established by this Order for Existing Dischargers shall be performance-based and set at lowest reasonably feasible historical discharge levels, taking into account precipitation-driven and other sources of variation in selenium concentrations; the interim effluent limitations for Future Dischargers shall also be performance-based and set at the lowest reasonably feasible levels based on consideration of requisite pre-discharge selenium quality characterization and historical selenium discharge levels for similar discharges, taking into account precipitation-driven and other sources of variation in selenium concentrations.
32. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, *et seq.*), in accordance with Section 15321(a)(2), Title 14, California Code of Regulations.
33. Any person adversely affected by this action of the Regional Water Board may petition the State Water Board to review the action. The petition must be received by the State Water Board Office of the Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

**IT IS HEREBY ORDERED THAT** pursuant to CWC Section 13300 and 13385, the Existing Dischargers listed in this Order and Future Dischargers under Order No. R8-2007-0041 shall comply with the following time schedule to ensure compliance with the final effluent limitations for selenium contained in Order No. R8-2007-0041, and as set forth in Findings 10 and 11 herein.

1. Dischargers seeking coverage under this Order shall elect to participate in the Nitrogen and Selenium Management Program (NSMP) and shall provide to the Executive Officer of the Regional Water Board a copy of the Memorandum of Procedure, as amended, showing Discharger's membership in the Working Group.
2. Dischargers seeking coverage under this Order shall re-certify, as required by their Notice of Intent, that they have documented and made all practicable attempts to avoid, reduce or eliminate the discharge of selenium as required by Section II.A.3

of Order No. R8-2007-0041, within 60 days from the date of this Order, or prior to any discharge under Order No. R8-2007-0041, whichever date is later.

3. Dischargers seeking coverage under this Order shall comply with the following interim effluent limitations for Total Recoverable Selenium during the pendency of this Order; provided the NSMP Working Group is complying with the tasks and process described in Finding 21 during the period of discharge (as established by the Discharger to the satisfaction of the Executive Officer), such Dischargers shall be deemed in compliance with this Order:
  - a. Existing Dischargers shall submit to the Executive Officer for approval, no later than 60 days following the adoption of this Order, a performance-based selenium effluent limitation that is based on historical selenium discharge levels (e.g., the lowest reasonably feasible concentration based on their historical selenium discharges). Upon approval by the Executive Officer, such Discharger must not exceed this interim effluent limitation during the pendency of this Order.
  - b. Future Dischargers shall submit to the Executive Officer for approval, prior to any discharge authorized under Order No. R8-2007-0041, a performance-based effluent limitation for selenium that is based on the requisite pre-discharge characterization of selenium quality and consideration of historical selenium discharge concentrations for similar discharges (e.g., the lowest reasonably feasible concentration based on prior selenium discharges and historical practices, if any, and those of other similarly-situated dischargers). Upon approval by the Executive Officer, such Discharger must not exceed this interim effluent limitation during the pendency of this Order.
4. Dischargers who enroll under Order No. R8-2007-0041 but who do not seek coverage under this Order shall comply with final effluent limitations for selenium by no later than December 20, 2009, as set forth in Order No. R8-2007-0041.
5. If, in the opinion of the Regional Water Board Executive Officer, any Discharger seeking coverage under this Order fails to comply with the provisions of this Order, the Executive Officer may apply to the State Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability. If compliance with this Order is not achieved, the Discharger would not be exempt from the mandatory minimum penalties for violation of certain effluent limitations, and may be subject to issuance of a Cease and Desist Order in accordance with CWC section 13301.

6. Any person signing a document submitted under this Order shall make the following certification:

*"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

7. This Order, as amended by Order No. R8-2013-0060 on December 6, 2013, shall remain in effect for a maximum of two years from its current expiration date, or until December 10, 2016, or until such time as Order No. R8-2007-0041 is re-issued to incorporate revised selenium effluent limitations and other requirements necessary to implement Board approved selenium TMDLs.

This Order is effective upon the date of signature.

  
KURT V. BERCHTOLD, Executive Officer

Originally issued on December 10, 2009  
Amended on December 6, 2013 (Order No. R8-2013-0060)

**California Regional Water Quality Control Board  
Santa Ana Region**

**December 10, 2009**

**Item: 9**

**Subject: Issuance of Time Schedule Order No. R8-2009-0069** for Dischargers Enrolled in Order No. R8-2007-0041, NPDES No. CAG918002, General Discharge Permit for Discharges to Surface Waters of Groundwater Resulting from Groundwater Dewatering Operations and/or Groundwater Cleanup Activities at sites within the San Diego Creek/Newport Bay Watershed Polluted by Petroleum Hydrocarbons, Solvent, Metals and/or Salts.

**Summary:**

The issuance of Time Schedule Order (TSO) No. R8-2009-0069 is appropriate and necessary to provide additional time for dischargers in the Newport Bay watershed to come into compliance with numeric effluent limitations for selenium that are specified in Order No. R8-2007-0041, which requires compliance with those limitations no later than December 20, 2009. The numeric selenium limitations are based on the current selenium water quality objectives established by the California Toxics Rule (CTR).

Total Maximum Daily Loads (TMDLs) and site-specific objectives (SSOs) for selenium are being developed by Regional Board staff in collaboration with the Nitrogen and Selenium Management Program (NSMP) Working Group. The TMDLs include numeric targets and allocations based on (i) the recommended selenium SSOs for the Newport Bay watershed, and, in the event the SSOs are not adopted, (ii) current CTR selenium objectives. These TMDLs and SSOs are expected to be presented to the Regional Board for consideration in the spring of 2010.

When approved, the selenium SSOs will replace the existing CTR-based water quality objectives for the Newport Bay watershed. The selenium effluent limitations in Order No. R8-2007-0041 will be revised as necessary in response to the approved TMDLs/SSOs.

The proposed TMDLs include an implementation plan and a schedule for compliance that will serve as the basis for a revised schedule for compliance with the selenium effluent limitations in Order No. R8-2007-0041. However, the compliance schedule authorization provided by the TMDLs will not become effective for the purposes of revising Order No. R8-2007-0041 until the TMDLs are approved by the USEPA. The TMDL approval process is expected to take more than one year. The TSO will extend the schedule for compliance with the numeric selenium effluent limitations in Order No. R8-2007-0041 for a maximum

of five years from the date of adoption of the TSO. This compliance schedule extension will allow the TMDL/SSO approval and permit amendment processes to be completed such that an appropriate compliance schedule, effluent limitations, and other requirements can be incorporated in the waste discharge requirements. This compliance schedule extension is appropriate because of the very significant commitment of resources by the NSMP Working Group to assist in the development of the selenium TMDLs/SSOs and a cutting-edge regional selenium management program (including development of selenium treatment technologies) for the Newport Bay watershed that will result in the achievement of water quality standards for a very difficult-to-address bioaccumulative pollutant.

**Discussion:**

In 2002, as part of a number of TMDLs for toxic pollutants, USEPA promulgated TMDLs for selenium for the San Diego Creek subwatershed and both Upper and Lower Newport Bay, based primarily on exceedance of the currently applicable CTR selenium criteria for freshwater, as well as trends in selenium concentrations in freshwater fish tissue and the proximity of Newport Bay to the San Diego Creek subwatershed. Rising groundwater in the San Diego Creek subwatershed is the primary source of selenium to the Bay.

In December 2004, the Regional Board adopted Order No. R8- 2004-0021, NPDES No. CAG998002, General Waste Discharge Requirements for Short-Term Groundwater-Related Discharges and De Minimus Wastewater Discharges to Surface Waters within the San Diego Creek/Newport Bay Watershed. Prior to the issuance of Order No. R8-2004-0021, most dewatering and other types of groundwater discharges in the watershed were considered insignificant, or "de minimus", contributors of pollutants and had been regulated under the Regional Board's general de minimus NPDES permit. The issuance of Order No. R8-2004-0021 was necessitated by the recognition that groundwater-related discharges in the Newport Bay watershed had the potential to contribute selenium to the surface waters in the watershed and that such discharges could no longer be considered insignificant in light of the findings of selenium impairment leading to the USEPA TMDLs. Order No. R8-2004-0021 included final numeric water quality based effluent limitations for selenium discharges based on the applicable CTR selenium criteria.

In adopting Order No. R8-2004-0021, the Regional Board also recognized that there were no conventional selenium treatment technologies that could be applied to achieve the selenium limitations and that, therefore, immediate compliance with the selenium limitations in the Order would likely be infeasible for many dischargers. Accordingly, Order No. R8-2004-0021 includes a schedule for compliance with the final numeric selenium limitations. Pursuant to the compliance schedule provisions of the State Board's policy for

implementation of the CTR criteria (the "SIP"<sup>1</sup>), Order No. R8-2004-0021 included a maximum five-year schedule for compliance with the selenium limitations, i.e, compliance with the selenium limitations was to be achieved as soon as possible but no later than December 20, 2009.

Numerous stakeholders within the Newport Bay watershed expressed ongoing concern that ultimate compliance with the selenium limitations, even with the five-year compliance schedule, would be highly problematic, given the lack of available, practicable treatment technology that could achieve the requisite selenium reductions. This concern, coupled with concerns about the validity and effectiveness of the CTR criteria for protecting biological resources in the watershed, prompted the formation of a voluntary program known as the Nitrogen and Selenium Management Program (NSMP), sponsored by the NSMP Working Group. The Working Group is comprised of many stakeholders in the Newport Bay watershed, including the County of Orange, municipalities within the watershed, other dischargers, and several environmental organizations. The Regional Board is a non-funding member of the Working Group. The Working Group proposed to develop and implement a five-year Work Plan designed to evaluate and recommend refinements to the USEPA selenium TMDLs, to develop treatment technologies and an appropriate implementation plan for the refined TMDLs, and to consider recommendations for a site-specific selenium objective for the Newport Bay watershed that would supplant the CTR selenium criteria<sup>2</sup>.

Order No. R8-2004-0021 included requirements that reflected the proposed NSMP Working Group approach and required the development, Regional Board approval, and thence implementation of a Work Plan to accomplish those specific tasks. Order No. R8-2004-0021 provided that participation by dischargers in the NSMP Working Group and effective and timely implementation of the approved Work Plan would constitute interim, performance-based limitations. The Order also allowed dischargers who did not wish to participate in the NSMP Working Group to implement a program approved by the Executive Officer to offset selenium discharges in excess of the final numeric effluent limitations. Steps to implement that offset program were considered interim, performance-based limitations. The intent of the offset program was to assure that there would be no net loading of selenium to surface waters in the Newport Bay watershed as the result of the discharges prior to full compliance with the final numeric effluent limitations.

In 2007, the Regional Board adopted Order No. R8-2007-0041 as part of a permit streamlining effort. Like Order No. R8-2004-0021, Order No. R8-2007-

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<sup>1</sup> "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California"

<sup>2</sup> The Working Group also committed to perform work to support the review of the Nutrient TMDL established for the Newport Bay watershed in 1998 and to formulate a nutrient management plan.

0041 regulates groundwater-related discharges but also includes requirements for discharges from groundwater cleanup operations within the Newport Bay watershed. This combined approach obviates the need for dischargers who may need authorization for both types of discharges to obtain coverage under both permits, for which payment of both permit fees would be required. Order No. R8-2007-0041 includes the same NSMP/offset interim performance-based limitations as Order No. R8-2004-0021. Consistent with the SIP, Order No. R8-2007-0041 maintains the same compliance schedule for achieving compliance with final numeric water quality based effluent limitations for selenium as Order No. R8-2004-0021, i.e., compliance with the final numeric effluent limitations must be achieved no later than December 20, 2009.<sup>3</sup> Discharge authorization for enrollees under Order No. R8-2004-0021 has been transferred to Order No. R8-2007-0041 and Order No. R8-2004-0021 now has been rescinded.

The approved NSMP Work Plan has now been essentially completed and has resulted in recommended, revised TMDLs, including an implementation plan. The TMDLs, including the implementation plan, are continuing to be refined further and are expected to be presented as a Basin Plan amendment for the Regional Board's consideration in the spring of 2010. Further, the NSMP Working Group effort has resulted in specific recommendations for site-specific objectives (SSOs) for selenium for the Newport Bay watershed. When fully approved, these SSOs will replace the CTR-based objectives for selenium in the Newport Bay watershed. These SSOs are reflected in the TMDLs to be recommended to the Regional Board and will be included in the Basin Plan amendment package to be considered by the Regional Board in the spring of 2010. In the event the SSOs are not adopted, the TMDLs also include alternative CTR-based numeric targets and allocations.

The proposed TMDLs currently include a recommended compliance schedule of a maximum of 15 years from the date the TMDLs become effective. The TMDLs become effective for NPDES and other Clean Water Act purposes once they are approved by USEPA. Once the TMDLs are fully approved, including by USEPA, the compliance schedule authorization provided in the TMDLs can be used as the basis for including compliance schedules for selenium limitations in NPDES permits. Once the TMDLs are finally approved, Regional Board staff will recommend specific revisions to Order No. R8-2007-0041 (and/or the issuance of a new permit, as appropriate) to incorporate requirements consistent with the TMDLs, including revised schedules for compliance and selenium effluent limitations (including, potentially, narrative or performance-based limitations). However, until the TMDL approval process is completed, the effective compliance date for those limits are those established in the existing Order. The TSO will provide for compliance with the existing Order.

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<sup>3</sup> The first time that the selenium-related discharges were subject to CTR-based effluent limitations was in Order No. R8-2004-0021, and discharges were required to meet CTR-based effluent limits no later than December 20, 2009.

While significant progress has been made to identify potential selenium treatment technologies (including regional treatment), compliance with the final numeric selenium limitations in Order No. R8-2007-0041 on December 20, 2009 remains infeasible for many dischargers. A significant amount of work remains to be done to further evaluate potential treatment technologies to assure their efficacy before costly, full-scale implementation is considered. The Working Group has prepared a draft BMP Strategic Plan that outlines the steps proposed to further address selenium BMP evaluation and implementation over the fifteen year period currently proposed by the draft TMDLs. Implementation of the BMP Strategic Plan is expected to result in compliance with the draft TMDLs and, thereby, water quality standards (as they may or may not be amended by the SSOs). The development and implementation of such a BMP plan is a requirement of the draft TMDLs for dischargers who elect to comply with applicable allocations through the NSMP process.

Absent additional compliance schedule relief, after December 20, 2009, groundwater-related discharges by the dischargers enrolled in Order No. R8-2007-0041 may result in violations of the final selenium effluent limitation in that Order. Such violations would likely result in the imposition of mandatory minimum penalties pursuant to section 13385 of the California Water Code.

Controlling sources of selenium inputs to surface waters in the Newport Bay watershed poses extraordinary challenges. As stated above, there is currently no readily available, conventional treatment technology that can be implemented in a reasonably practicable manner for point source or non-point sources of selenium. Further, in the Newport Bay watershed, approximately 85% of the existing selenium loads in surface waters originates from groundwater, and much of this load (about 78%) results from diffuse rising groundwater, which enters surface waters via springs and seeps in the unlined portions of the channels, and cracks and weepholes in storm drains and the concrete-lined portions of the channels. Discrete, groundwater-related discharges (e.g., groundwater dewatering and cleanup) and other regulated discharges (e.g., urban runoff) account for a relatively small part of the selenium load to surface waters. It is evident that selenium reductions needed to protect beneficial uses would be best achieved on a regional, watershed-wide scale.

The NSMP Working Group has made, and continues to make significant commitments of resources to develop a proposed watershed-wide selenium management strategy that will address rising groundwater, as well as dewatering and other types of discharges. The TMDLs that will be recommended to the Regional Board in early spring 2010 rely to a significant degree on that management strategy and its implementation. In light of those significant commitments by the Working Group, that a management strategy has been identified that is believed will achieve water quality standards but requires additional time to be approved and implemented, and in view of the recognized need to provide more time to evaluate and implement effective selenium



**TSO R8- 2009-0069**

treatment BMPs, it is appropriate to provide additional schedule relief for compliance with the numeric selenium limitations in Order No. R8-2007-0041. Additional compliance schedule relief will allow for full approval of the TMDLs/SSOs and revision of the Order to incorporate revised compliance schedules and effluent limitations consistent with the TMDLs. The issuance of the TSO will not delay ultimate compliance with the TMDLs. Rather, the TSO will merely provide additional time for approval of the TMDLs/SSOs while protecting the dischargers who have committed and will commit significant resources to their development and implementation from enforcement for violations of Order No. R8-2007-0041.

California Water Code section 13300 states: "Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements." A detailed time schedule of actions proposed to address final selenium effluent limitation compliance has been submitted and is reflected in Tentative TSO No. R8-2009-0069. Dischargers seeking coverage under the TSO are required to implement these tasks in accordance with the schedule identified.

Once the TMDLs are approved and Order No. R8-2007-0041 is revised accordingly, including a revised schedule for compliance and selenium effluent limitations, the TSO will be rescinded.

**Recommendation:** Adopt Time Schedule Order No. R8-2009-0069 as presented.

State of California  
California Regional Water Quality Control Board  
Santa Ana Region

March 22, 2013

ITEM:        **\*10**

SUBJECT:    Renewal/Update of Waiver of Waste Discharge Requirements for Specific  
Types of Discharges, Resolution No. R8-2013-0015

DISCUSSION:

The Regional Board prescribes Waste Discharge Requirements for waste discharges in accordance with Section 13263 of the California Water Code. Many types of discharges, however, do not contain a significant amount of pollutants, and have no significant effect on the quality and beneficial uses of the waters of the State. It is in the best interest of the public and the Board not to expend the resources necessary to regulate discharges that have an insignificant potential to affect water quality standards.

Section 13269 of the California Water Code empowers the Regional Board to waive waste discharge requirements for specific types of discharges where such a waiver is in the public interest. Such waivers are conditional and may be terminated by the Board at any time.

It is important to emphasize also that each request for such a waiver would be considered on a case-specific basis by Regional Board staff. The Regional Board retains its authority to issue waste discharge requirements, or to take other requisite regulatory action, where site-specific conditions warrant. This is true even when the conditions specified in the waiver resolution are met. It is recognized that the waiver conditions may not anticipate all relevant factors (e.g., proximity to groundwater contamination plumes or to Clean Water Act Section 303(d) listed impaired waters) that may necessitate an independent regulatory response.

Water Code Section 13269 stipulates that all existing waivers must be reviewed at 5-year intervals and either renewed or terminated.

On September 7, 2007, the Regional Board adopted Resolution No. R8-2007-0036, which waived waste discharge requirements for specific types of discharges, provided that certain conditions stipulated in the resolution were met. Since Resolution No. R8-2007-0036 was adopted more than five years ago, the Regional Board must review the conditions specified in the resolution pursuant to Water Code Section 13269.

Accordingly, the 2007 list of specific types of discharges has been reviewed. The proposed Resolution No. R8-2013-0015 continues the criteria for waivers specified in Resolution R8-2007-0036 for the following types of discharges:

- a. Inert Waste Disposal Operations,
- b. Sand, Gravel, and Quarry Operations,
- c. Residential Onsite Wastewater Disposal Systems (septic tanks ) Not Within Prohibition Areas,
- d. Industrial and Commercial Onsite Wastewater Disposal Systems (septic tanks) Not Within Prohibition Areas,
- e. Monitoring Well Purge water,
- f. Well Drill Cuttings,
- g. Incidental Discharge of Oily Wastewater During Oil Spill Response Activities, and
- h. Other Insignificant Discharges of Wastewater to Land (eg: potable water pipeline draining, groundwater dewatering, etc.).
- i. Groundwater Recharge Projects Using Imported Water

One additional type of discharge is being added to the list - Composting Research Projects.

Composting Research Projects are pilot projects that typically last one to three years, involve a small quantity of feedstock materials, and are conducted over a small area of land. These research projects are conducted strictly for information gathering, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. As such, these projects are categorically exempted under Section 15306 (Information Collection) of the CEQA by the lead agencies conducting CEQA compliance. A waiver of WDRs is appropriate for this type of projects where insignificant threat to water quality is demonstrated through meeting the following conditions:

1. Active composting and curing materials, such as feedstocks, additives, and amendments, are stored and treated on working surface or composting pads(s) meeting a minimum hydraulic conductivity of  $1 \times 10^{-6}$  cm/s;
2. Compost leachate, wastewater, and stormwater runoff that comes into contact with raw, partial, and active composting materials are collected and stored in a wastewater containment system or basin having a liner meeting a minimum hydraulic conductivity of  $1 \times 10^{-6}$  cm/s;

3. The wastewater containment system shall be designed, constructed and maintained to contain runoff resulting from a 25-year, 24-hour storm event; and
4. No offsite discharge from the research project area is allowed unless the discharge is specifically permitted under an NPDES permit.

Board staff considered the merits of the development of general waste discharge requirements for one or more of the types of discharges identified in the proposed waiver resolution. The advantage of such an approach would be that general waste discharge requirements would not need to be revisited more than once every ten years, as opposed to the requirement to review the waiver resolution at least once every five years. However, considerable staff time would be required to develop general waste discharge requirements applicable to these discharges. Given that these discharges are not expected to have significant impacts on water quality standards, Board staff believes that it is a better use of the Board's resources to adopt and implement the proposed waiver resolution. Efficient use of the Board's resources is in the public interest.

The types of waste discharges listed in Attachment "A" to Resolution No. R8-2013-0015 were identified on the basis that they should not result in significant adverse environmental effects, provided that the criteria and conditions also listed in Attachment "A" are satisfied. Again, where site-specific conditions warrant, the Executive Officer may specify additional criteria and conditions.

The waiver of waste discharge requirements for the specific types of discharges identified in Attachment "A" will not affect the Regional Board's authority to regulate discharges where water quality or beneficial uses could be impacted. The Resolution explicitly grants the Executive Officer of the Regional Board the authority to deny waivers for specific projects and to recommend to the Regional Board issuance of individual waste discharge requirements, or coverage under applicable general waste discharge requirements, for projects determined to have the potential for significant impacts on the water quality standards of the State.

**RECOMMENDATION:**

Adopt Resolution No. R8-2013-0015 as presented.

Comments were solicited from the following agencies:

U.S. Army District, Los Angeles, Corps of Engineers, Regulatory Branch  
U.S. Fish and Wildlife Service – Carlsbad  
State Water Resources Control Board, Division of Water Quality – Vicky Whitney  
State Water Resources Control Board, Office of the Chief Counsel – David Rice  
California Department of Fish and Wildlife, Inland Desert Region – Kimberly Nicol  
California Department of Fish and Wildlife, South Coast Region – Ed Pert  
California Department of Public Health, San Bernardino – Sean McCarthy  
California Department of Public Health, San Diego – Steven Williams  
California Department of Public Health, Santa Ana – Anthony Nhan  
State Department of Water Resources - Glendale  
Orange County Health Care Agency – Oliver Pacifico  
Orange County Public Works - Chris Crompton  
Orange County Water District - Nira Yamachika/Greg Woodside/Marsha Westropp  
Riverside County Environmental Health – John Watkins  
Riverside County Flood Control and Water Conservation District – Jason Uhley  
San Bernardino County Environmental Health Services – Josh Dugas  
San Bernardino County Flood Control –Annesley Ignatius/Gia Kim  
Santa Ana River Dischargers Association – Edward Filadelfia  
Santa Ana Watershed Project Authority – Celeste Cantu  
South Coast Air Quality Management District - Barry Wallerstein  
Chino Basin Watermaster – Peter Kavounas  
Inland Empire Waterkeeper – Megan Brousseau  
Lawyers for Clean Water – Daniel Cooper  
Orange County Coastkeeper – Garry Brown

State of California  
California Regional Water Quality Control Board  
Santa Ana Region

RESOLUTION NO. R8-2013-0015

Waiver of Waste Discharge Requirements  
for Specific Types of Discharges

WHEREAS, the California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. Section 13263(a) of the California Water Code requires Regional Boards to prescribe requirements for existing and proposed waste discharges in their respective areas of jurisdiction.
2. Section 13269 of the California Water Code authorizes Regional Boards to waive waste discharge requirements for a specific discharge or specific types of discharges where such a waiver is consistent with applicable water quality control plans and is in the public interest.
3. The waiver of waste discharge requirements for discharges that do not pose a significant threat to water quality would enable staff resources to be used effectively and avoid unnecessary expenditures of these limited resources and, thus, is in the public interest.
4. Section 13269 of the California Water Code requires Regional Boards to review and renew or terminate all waivers every five years and to conduct a public hearing prior to renewing any waiver for a specific type of discharge in order to determine whether the discharge should be subject to general or individual waste discharge requirements.
5. On September 7, 2007, the Regional Board adopted Resolution No. R8-2007-0036 for waiver of waste discharge requirements for specific types of discharges. Resolution No. R8-2007-0036 must be reviewed and updated to comply with Section 13269 of the California Water Code.
6. Attachment "A" to this Resolution lists specific types of discharges that are expected to continue to have an insignificant effect on the quality of waters of the State, provided the corresponding criteria and conditions are met. Each such discharge would be considered on a case-specific basis to determine whether and what additional conditions are required to protect the quality of waters of the State, or whether coverage under individual or general waste discharge requirements is necessary.

**Resolution No. R8-2013-0015**  
**Waiver of Waste Discharge Requirements**

7. Waiving waste discharge requirements for the specific types of discharges listed in Attachment "A" is in the public interest. These discharges will not have an adverse impact on water quality standards or the environment, provided that the discharger satisfies the criteria and conditions identified in Attachment "A" and any additional conditions specified by the Executive Officer as the result of case-specific consideration of the proposed discharge. Further, the Executive Officer has the authority to deny a request for a waiver where such a waiver would not be in the public interest.
8. On September 6, 2002, the Regional Board adopted an Initial Study and Negative Declaration regarding the waiver of waste discharge requirements for the majority of the specific types of discharges listed in Attachment "A" in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) and the State Guidelines. The types of activities identified in Attachment "A" will not have a significant effect on the environment provided that they are conducted in conformance with the criteria and conditions specified in Attachment "A" and any additional criteria/conditions specified by the Executive Officer in issuing a waiver of waste discharge requirements.
9. This resolution waives waste discharge requirements for one additional type of discharge listed in Attachment "A", Composting Research Projects, to the specific types of discharges for which waste discharge requirements were waived under Resolution R8-2007-0036. The Composting Research Projects are conducted strictly for information gathering, or as part of a study leading to an action which a public agency has not yet approved, adopted or funded. These projects are categorically exempt under Section 15306, Title 14, California Code of Regulations. Therefore, the adoption of this resolution to waive waste discharge requirements complies with the California Environmental Quality Act.
10. On March 22, 2013, the Board held a public meeting and considered all the evidence concerning this matter. Notice of this hearing was given to all interested persons in accordance with the California Government Code Section 11125.

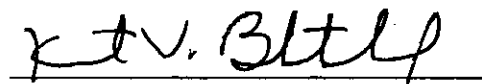
**THEREFORE, BE IT RESOLVED** that the California Regional Water Quality Control Board, Santa Ana Region:

1. Waives waste discharge requirements for the specific types of discharges listed in Attachment "A", except those for which individual waste discharge requirements or general waste discharge requirements have already been

**Resolution No. R8-2013-0015**  
**Waiver of Waste Discharge Requirements**

- adopted. Waste discharge requirements are waived for each specific type of discharge listed provided that the corresponding criteria and conditions are met.
2. Waste discharge requirements for the specific types of discharges listed in Attachment "A" that were waived by previous resolutions adopted by the Regional Board continue, provided that the corresponding criteria and conditions continue to be met.
  3. For new discharges, waste discharge requirements for a specific discharge shall be considered waived only after a Report of Waste Discharge<sup>1</sup> is submitted and the Executive Officer determines that the conditions specified in Attachment "A" for the specific type of discharge will be met.
  4. Any action under this waiver is conditional and may be terminated for any type of discharge or any specific discharge at any time within the term of this waiver.
  5. Waste discharge requirements for a specific discharge shall be considered waived only after the Executive Officer determines that the conditions specified in Attachment "A" for the specific type of discharge will be met.
  6. The Executive Officer is authorized to deny a waiver of waste discharge requirements and to recommend the issuance of individual waste discharge requirements or coverage under general waste discharge requirements for projects that would result in the discharge of waste that may have a significant impact on the water quality standards of the State.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Santa Ana Region, on March 22, 2013.



Kurt V. Berchtold  
Executive Officer

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<sup>1</sup> The need to file a formal Report of Waste Discharge, pursuant to CWC Section 13260, may be waived by the Executive Officer on a case-by-case basis.



Attachment "A" to Resolution No. R8-2013-0015

Specific Types of Discharges for Which Waste Discharge Requirements are Waived

| TYPES OF DISCHARGE  | CRITERIA AND CONDITIONS  |
|---|--|
| <p>Inert Waste Disposal Operations</p>  | <ol style="list-style-type: none"> <li>1. Only inert waste, as defined in Section 20230, Division 2, Title 27, of the California Code of Regulations, will be disposed of. No green waste, wood waste or gypsum board (or similar construction wastes) are allowed,</li> <li>2. Controls sufficient to contain all surface runoff are installed, where necessary, and</li> <li>3. The site will be adequately secured to prevent unauthorized disposal by the public.</li> </ol> |
| <p>Sand, Gravel, and Quarry Operations</p>  | <ol style="list-style-type: none"> <li>1. All operations and wash waters are contained within the facility,</li> <li>2. No waste discharge (including storm water runoff from operations areas) to surface waters will occur, and</li> <li>3. Stockpiles and settling basins will be protected from inundation from 100-year peak storm flows.</li> </ol>  |
| <p>Residential Onsite Wastewater Disposal Systems (septic tanks) Not Within Prohibition Areas</p>               | <ol style="list-style-type: none"> <li>1. Developments comply with the Regional Board's "Guidelines for Sewage Disposal from Land Developments", and</li> <li>2. Developments comply with the Regional Board's "Minimum Lot Size Requirements and Exemption Criteria for New Developments Using On-Site Septic Tank-Subsurface Leaching/Percolation Systems".</li> </ol>   |
| <p>Industrial and Commercial Onsite Wastewater Disposal Systems (septic tanks) Not Within Prohibition Areas</p> | <ol style="list-style-type: none"> <li>1. Only sanitary wastes to be discharged into the septic systems,</li> <li>2. Developments comply with the Regional Board's "Guidelines for Sewage Disposal from Land Developments", and</li> <li>3. Developments comply with the Regional Board's "Minimum Lot Size Requirements and Exemption Criteria for New Developments Using On-Site Septic Tank-Subsurface Leaching/Percolation Systems".</li> </ol>                              |

| TYPES OF DISCHARGE   | CRITERIA AND CONDITIONS  |
|--|--|
| Monitoring Well Purge Water  | <ol style="list-style-type: none"> <li>1. Purge water is discharged to the ground in a manner so that it will percolate back into the aquifer in the same general area from which it came, and</li> <li>2. Adequate measures will be taken to prevent purge water from reaching surface waters.</li> </ol>   |
| Well Drill Cuttings  | <ol style="list-style-type: none"> <li>1. Cuttings determined not to be considered as hazardous waste, and</li> <li>2. Cuttings disposed of or used in a manner so as to not affect water quality or beneficial uses.</li> </ol>   |
| Incidental Discharge of Oily Wastewater During Oil Spill Response Activities | <ol style="list-style-type: none"> <li>1. Discharges occur during an oil spill response activity, and</li> <li>2. Discharges are within or proximate to the oil spill response area.</li> </ol>  |
| Composting Research Projects   | <ol style="list-style-type: none"> <li>1. Active composting and curing materials, such as feedstocks, additives, and amendments, are stored and treated on working surface or composting pads(s) meeting a minimum hydraulic conductivity of <math>1 \times 10^{-6}</math> cm/s;</li> <li>2. Compost leachate, wastewater, and stormwater runoff that comes into contact with raw, partial, and active composting materials are collected and stored in a wastewater containment system or basin having a liner meeting a minimum hydraulic conductivity of <math>1 \times 10^{-6}</math> cm/s;</li> <li>3. The wastewater containment system shall be designed, constructed and maintained to contain runoff resulting from a 25-year, 24-hour storm event; and</li> <li>4. No offsite discharge from the research project area is allowed unless the discharge is specifically permitted under an NPDES permit.</li> </ol> |

| TYPES OF DISCHARGE   | CRITERIA AND CONDITIONS  |
|--|--|
| Groundwater Recharge Projects Using Imported Water   | <ol style="list-style-type: none"> <li>1. Any agency that intentionally recharges imported water within the Santa Ana Region will collect, compile, and analyze N/TDS and constituents of emerging concern (CECs) water quality data necessary to determine whether the intentional recharge of imported water in the Region may have a significant adverse impact on compliance with the N/TDS objectives within the Region, and</li> <li>2. The recharge proponent must be a signatory to the Cooperative Agreement to Protect Water Quality and Encourage the Conjunctive Uses of Imported Water in the Santa Ana River Basin, or a similar agreement with the Regional Water Board.</li> </ol> |
| Other Insignificant Discharges of Wastewater to Land (eg: potable water pipeline draining, groundwater dewatering, etc.) | <ol style="list-style-type: none"> <li>1. All wastewater discharged in a manner so that it will percolate into the ground before reaching surface waters, and</li> <li>2. All wastewater disposed of or used in a manner so as to not affect water quality or beneficial uses.</li> </ol>  |

**The following conditions apply to all of the above types of discharges:**

1. Implementation of the project shall not create a nuisance or pollution as defined in the California Water Code Section 13050.
2. The project shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board, as required by the Clean Water Act.
3. The discharge of any substance in concentrations toxic to animal or plant life is prohibited.
4. The waiver of waste discharge requirements may be terminated by the Executive Officer at any time.
5. Discharges subject to discretionary approval by other agencies will be eligible for a waiver only after the completion of any documentation required by the California Environmental Quality Act.
6. Compliance with the criteria and conditions identified for each type of discharge does not guarantee issuance of a waiver. Each waiver request will be considered on a case-specific basis. The Executive Officer, at his/her discretion, may deny the request for a waiver and recommend coverage of the discharge under an individual waiver, or coverage under individual or general waste discharge requirements as appropriate to protect water quality.

## **D.9 Region 9. San Diego Regional Water Quality Control Board**

Order No. R9-2007-0034. General Waste Discharge Requirements for Discharges from Temporary Groundwater Extraction and Similar Waste Discharges to San Diego Bay, Tributaries Thereto under Tidal Influence, and Storm Drains or Other Conveyance Systems Tributary Thereto

Order No. R9-2008-0002. General Waste Discharge Requirements for Groundwater Extraction and Similar Waste Discharges from Construction, Remediation, and Permanent Groundwater Extraction Projects to Surface Waters within the San Diego Region Except for San Diego Bay

Resolution No. R9-2007-0104. Amendment to the Water Quality Control Plan for the San Diego Basin (9) to Incorporate the Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge within the San Diego Region

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Linda S. Adams  
Secretary for  
Environmental Protection

# California Regional Water Quality Control Board

## San Diego Region

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Arnold Schwarzenegger  
Governor



### GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM TEMPORARY GROUNDWATER EXTRACTION AND SIMILAR WASTE DISCHARGES TO SAN DIEGO BAY, TRIBUTARIES THERETO UNDER TIDAL INFLUENCE, AND STORM DRAINS OR OTHER CONVEYANCE SYSTEMS TRIBUTARY THERETO (WDR)

**ORDER NO. R9-2007-0034**  
**NPDES NO. CAG919001**

A Discharger, as described in the following table that has complied with the requirements for coverage under this General "Waste Discharge Requirements" (WDR), is subject to waste discharge requirements, once permit coverage is effective, as set forth in this WDR.

|             |  |
|-------------|--|
| Dischargers | Any person with temporary discharges from ground water extraction activities to waters of the San Diego Bay, tributaries thereto under tidal influence, and storm drains or other conveyances systems tributary thereto that do not cause, have the reasonable potential to cause, or contribute to an instream excursion above any applicable State or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water. |
|-------------|--|

|  |                  |
|--|------------------|
| This WDR was adopted by the Regional Board on:   | October 10, 2007 |
| This WDR shall become effective on:  | October 10, 2007 |
| This WDR shall expire on:  | October 10, 2012 |
| The U.S. Environmental Protection Agency and the California Regional Water Quality Control Board, San Diego Region have classified these discharges as minor discharges. |                  |

IT IS HEREBY ORDERED that Order No. 2000-90 is rescinded upon the effective date of this WDR except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted therein, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted therein, Dischargers shall comply with the requirements in this WDR.

I, John H. Robertus, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region on October 10, 2007.

John H. Robertus, Executive Officer

**California Environmental Protection Agency**

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## **I. DISCHARGE INFORMATION**

### **A. Groundwater Extraction**

Existing and proposed discharges of groundwater extraction waste to San Diego Bay from construction groundwater extraction, foundation groundwater extraction and groundwater extraction related to groundwater remediation cleanup projects (collectively groundwater extraction):

1. Result from similar operations (all involve extraction and discharge of groundwater);
2. Are the same type of wastes (all are groundwater containing or potentially containing petroleum hydrocarbons, solvents, or other pollutants);
3. Require similar effluent limitations for the protection of the beneficial uses of San Diego Bay;
4. Require similar monitoring; and
5. Are more appropriately regulated under a WDR rather than individual permits.

## **II. PERMIT INFORMATION**

### **A. Application**

To obtain coverage under this WDR a Discharger must submit the following to the California Regional Water Quality Control Board, San Diego Region (Regional Board):

1. A Notice of Intent (NOI), including the following information:
  - a. Owner/Operator name;
  - b. Owner/Operator address;
  - c. Owner/Operator telephone number;
  - d. Site name
  - e. Site address
  - f. Type of discharges;
  - g. Name of receiving waterbody and conveyance(s); and
2. An initial sampling and monitoring report of 164 constituents for flows of 50,000 gallons per day (gpd) or more or 38 constituents for flows under 50,000 gpd;
3. A project map(s) that shows the essential features of the groundwater extraction system within the Regional Board boundary, and the corresponding surface water or storm drain to which water will be discharged; and
4. Payment of the application fee, equal to the first annual fee, made payable to "SWRCB."

The NOI form is included within this WDR package as Attachment B.

The WDR NOI, including, map(s), the application fee, and other attachments, must be submitted to the following address:

CRWQCB – San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

Attn: Groundwater Extraction to San Diego Bay  
Southern Core Regulatory Unit  
NOTICE OF INTENT

#### **B. Coverage**

WDR coverage will be effective when all of the following have occurred:

1. The Discharger has submitted a complete NOI application (including initial sampling and monitoring report), as determined by the Regional Board; and
2. The Regional Board issues the Discharger's a Notice of Enrollment, which includes the discharge flow limit, mass limit, any additional or increase in monitoring due to specific circumstances of the discharge, and any other additional requirements.
3. Current dischargers enrolled in Order No. 2000-90 shall re-enroll no later than 365 days after adoption of this WDR, each discharger currently enrolled in Order No. 2000-90 shall continue to comply with Order No. 2000-90 until obtaining permit coverage under this WDR.

#### **C. Eligibility Criteria**

This WDR is intended to cover temporary discharges of groundwater extraction wastes to San Diego Bay, and its tributaries under tidal influence, from groundwater extraction due to construction and other groundwater extraction activities. Dischargers must meet the following criteria to be subject to waste discharge requirements by this WDR:

1. The discharge of any flow (rate or volume) of extracted groundwater due to groundwater extraction activities is discharged into San Diego Bay;
2. The discharge of groundwater extraction wastes will not be permanent. Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges.
3. Pollutant concentrations in the discharge comply with the Discharge Specifications of this WDR.

This WDR does not cover:

**PERMANENT DISCHARGES** – Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges except for the following two existing permanent groundwater extraction discharges currently

enrolled in Order 2000-90 until such time the discharges receive an individual permit:

- a. Embassy Suites Hotel permanent dewatering system
- b. One America Plaza permanent dewatering system

**STORM WATER** - Storm water runoff due to construction activities. These activities may be covered under the statewide general NPDES permit for storm water discharges associated with construction activities (CAS000002), the statewide general NPDES permit for storm water runoff associated with small linear underground/overhead construction projects (CAS000005), and/or Clean Water Act (CWA) Section 401 Water Quality Certifications.

**SANITARY SEWER** - Discharges to a sanitary sewer. These discharges do not need coverage under the NPDES Program. Contact the agency controlling the sanitary sewer for approval prior to discharging to its conveyance system.

**UTILITY VAULTS** - Discharges from utility vaults and underground structures. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water (CAG990002).

**HYDROSTATIC/ POTABLE WATER** - Discharges from drinking water well development. These discharges are covered under Order No. R9-2002-0020.

**D. Discharge to a Municipal Separate Storm Sewer System (MS4)**

Prior to discharging into an MS4, the Discharger shall demonstrate alternatives to discharging extracted groundwater waste into an MS4 and why it is technically or economically infeasible to implement these alternatives.

Without prior approval from the appropriate local agency with jurisdiction over the MS4, the discharger shall not discharge extracted groundwater waste under this WDR into an MS4.

Local agencies responsible for operating the MS4s may not passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the MS4 operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or control. These discharges may cause or contribute to a condition of contamination or a violation of water quality standards.

Therefore, at least 30 days prior to initiating an extracted groundwater discharge to an MS4, the Discharger shall notify and receive authorization from the appropriate local agency with jurisdiction over the MS4. This requirement encourages communication between Dischargers enrolled under this WDR and local agencies responsible for MS4s in an effort to reduce misunderstandings and concerns over the types of discharges covered by this WDR.

#### **E. Termination of Discharges**

Dischargers shall submit a written request referred to as a "Notice of Termination (NOT)" to this Regional Board when coverage under this WDR is no longer required. The NOT letter constitutes a notice that the owner (and his/her agent) of the site has ceased the discharge of ground water associated with the groundwater extraction activities at the site under this WDR.

The NOT should include "Notice of Termination (NOT)" In the subject line, the Waste Discharge Identification Number (WDID) assigned to the project by the Regional Board when enrolled in the WDR, the name and address of the owner, and be signed and dated by the owner in accordance with the signatory requirements of the WDR. The Discharger shall continue to comply with the requirements of the WDR until the Regional Board approves the NOT. Submittal of a NOT letter does not guarantee termination. Approval of the NOT does not relieve the Discharger's responsibility for paying any applicable outstanding invoices of annual fees as a result of enrollment under this WDR.

#### **F. Re-Enrollment of Renewed Permit**

Dischargers enrolled under previous WDR Order No. 2000-90 that plan on continuing their discharge, must re-enroll by submitting an NOI to obtain coverage under this WDR. Re-enrollees shall re-enroll no later than 365 days after the date of adoption of this WDR to achieve compliance with the new effluent limitations and criteria established by this WDR.

At the current time, permanent discharges from the following extraction facilities that were enrolled into the prior WDR may continue as permanent enrollees, provided they comply with the new effluent limitations, monitoring reporting program, and other criteria in this WDR:

- a. Embassy Suites Hotel permanent dewatering system
- b. One America Plaza permanent dewatering system

#### **G. Transferring Ownership**

Enrollment under the WDR for a specific project is not transferable. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the enrolled Discharger, the Discharger must notify the new succeeding owner or operator of the existence of this WDR by letter 120 days prior to property transfer, a copy of which must be immediately forwarded to the Regional Board office. Additionally, the Discharger must submit a NOT to the Regional Board. The new succeeding owner or operator must submit a new NOI in application of enrollment under this WDR.

### **III. Findings**

The Regional Board finds:

#### **A. Background**

This WDR supersedes Order No. 2000-90. The NPDES No. CAG919001 remains the same. Dischargers enrolled under previous Order No. 2000-90 must obtain coverage under this new WDR to continue their discharge subject to waste discharge requirements in this WDR.

**B. Discharge Subject to Waste Discharge Requirements**

To be subject to waste discharge requirements in this WDR for continued and future discharge to waters of the United States, Dischargers must submit an NOI and obtain coverage in order to be regulated under this WDR as provided in 40 CFR section 122.28 (b)(2).

**C. Discharge Description**

Existing and proposed discharges of groundwater extraction waste to San Diego Bay from construction groundwater extraction, foundation groundwater extraction and groundwater extraction related to groundwater remediation (collectively referred to as Groundwater Extraction):

**D. Legal Authorities**

These waste discharge requirements are issued pursuant to Sections 13263 and 13377 of the California Water Code (CWC). The Regional Board shall prescribe requirements as to the nature of any proposed discharge and shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act, also referred as the Clean Water Act (CWA).

These waste discharge requirements issued by the Regional Board shall also serve as an NPDES permit for point source discharges from groundwater extraction waste to San Diego Bay.

States may request authority to issue general NPDES permits pursuant to 40 CFR section 122.28. On June 8, 1989, the California State Water Resources Control Board (State Board) submitted an application to USEPA requesting revisions to its NPDES Program in accordance with 40 CFR sections 122.28, 123.62, and 403.10. The application included a request to add WDR authority to its approved NPDES Program. On September 22, 1989, USEPA, Region 9, approved the State Board's request and granted authorization for the State of California to issue general NPDES permits.

**E. Background and Rationale for Requirements**

The Regional Board developed the requirements in this WDR based on information submitted as part of the applications for several like agencies, individuals, and entities, through monitoring and reporting programs, and through special studies. Attachments A through F, which contain background information and rationale for WDR requirements, are hereby incorporated into this WDR and constitute part of the Findings for this WDR.

**F. California Environmental Quality Act (CEQA)**

This action to adopt a WDR is exempt from the provisions of CEQA (Public Resources Code section 21100, et seq.) in accordance with CWC section 13389.

**G. Technology-Based Effluent Limitations (TBELs)**

Permits shall include applicable TBELs and standards. (40 CFR § 122.44(a)). This WDR does not include numeric-TBELs because USEPA has not promulgated effluent limitation guidelines for groundwater extraction.

**H. Water Quality-Based Effluent Limitations (WQBELs)**

Permits shall include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. (40 CFR § 122.44(d)). Where numeric water quality criteria have not been established, WQBELs may be established using USEPA CWA section 304(a) criteria guidance, proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter. (40 CFR § 122.44(d)).

**I. Water Quality Control Plan**

The Regional Board's Water Quality Control Plan for the San Diego Basin (hereinafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The Basin Plan was adopted by the Regional Board on September 8, 1994, and was subsequently approved by the State Board on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and the State Board.

In addition, State Board Resolution No. 88-63 establishes state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal and domestic supplies. Requirements of this WDR specifically implement the applicable provisions of the Basin Plan and State Board policy.

**J. National Toxics Rule (NTR) and California Toxics Rule (CTR)**

The USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995, and November 9, 1999. The CTR was adopted by USEPA on May 18, 2000, and amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to these discharges.

**K. State Implementation Policy**

On March 2, 2000, the State Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by USEPA through the NTR and to the priority pollutant objectives established by the Regional Boards in their Basin Plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the USEPA Regional Administrator. The alternate test procedures provision became effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for WQBELs and for calculating WQBELs. The SIP also requires Dischargers to submit sufficient data to make the determination, and if necessary to calculate the

WQBELs. The State Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives, and provisions for chronic toxicity control. Requirements of this WDR implement the SIP.

**L. Compliance Schedules and Interim Requirements**

Current dischargers enrolled in Order No. 2000-90 shall re-enroll no later than 365 days after adoption of this WDR, each discharger currently enrolled in Order No. 2000-90 shall continue to comply with Order No. 2000-90 until obtaining coverage under this WDR.

**M. Antidegradation Policy**

Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Board established California's antidegradation policy in State Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Boards' Basin Plans implement, and incorporate by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharges are consistent with the antidegradation provision of 40 CFR section 131.12 and State Board Resolution No. 68-16.

**N. Anti-Backsliding Requirements**

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations of 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this WDR are at least as stringent as the effluent limitations in the previous Order.

**O. Monitoring and Reporting**

Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

**P. Standard and Special Provisions**

Standard Provisions, which in accordance with 40 CFR sections 122.41 and 122.42 apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Board has also included in this WDR special provisions applicable to the enrolled Dischargers. A rationale for the special provisions contained in this WDR is provided in the attached Fact Sheet (Attachment F).

**Q. Notification of Interested Parties**

The Regional Board has notified the Dischargers, interested agencies and persons of its intent to prescribe WDRs for these discharges, and has provided them with an opportunity to submit their written comments and recommendations. Notification details are provided in the Fact Sheet of this WDR.

**R. Consideration of Public Comment**

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharges. Details of the Public Hearing are provided in the Fact Sheet of this WDR.

**S. Alaska Rule**

On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 CFR section 131.21, 65 FR 24641, April 27, 2000). Under the revised regulation (also known as the Alaska rule), USEPA must approve new and revised standards submitted to USEPA after May 30, 2000, before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

**IV. Discharge Prohibitions**

- A.** The discharge of wastewater at a location, or in a manner different from that described in the Findings, NOI, or Notice of Enrollment is prohibited.
- B.** The discharge of wastewater shall not create or cause conditions of nuisance or pollution.
- C.** The discharge shall not cause, have a reasonable potential to cause, or contribute to an in-stream excursion above any applicable criterion promulgated by USEPA pursuant to section 303 of the CWA, or water quality objective adopted by the State or Regional Boards.
- D.** The discharge of waste to areas designated by the State Board as being of special (ASBS) biological significance is prohibited. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.
- E.** The discharge of groundwater extraction wastes from a specific site in excess of the flowrate specified in the Notice of Enrollment from the Regional Board is prohibited, unless the enrollee obtains a revised discharge Notice of Enrollment authorizing an increased flowrate.
- F.** The addition of pollutants to extracted groundwater to be discharged to San Diego Bay is prohibited. The only exception to this prohibition is that chemicals may be added to extracted groundwater to control biofouling in treatment systems, provided that extracted groundwater discharged to San Diego Bay



meets the effluent limitations for such chemicals established by this WDR and in the discharge Notice of Enrollment issued by the Regional Board.

- G. The discharge of groundwater extraction wastes to San Diego Bay is prohibited unless an NOI has been submitted, and the Regional Board has provided the Discharger with a written Notice of Enrollment identifying the discharge subject to waste discharge requirements.
- H. Discharges of waste to San Diego Bay from permanent groundwater extraction operations are prohibited. Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges except for the following two existing permanent groundwater extraction discharges currently enrolled in Order 2000-90 until such time the discharges receive an individual permit:
  - a. Embassy Suites Hotel permanent dewatering system
  - b. One America Plaza permanent dewatering system
- I. The discharge of groundwater extraction wastes to San Diego Bay from a construction operation after the date of completion of construction of structures requiring construction groundwater extraction is prohibited.
- J. The discharge of groundwater extraction wastes to San Diego Bay from a groundwater remediation operation after the date groundwater has been remediated to the satisfaction of the Regional Board is prohibited.
- K. Compliance with Discharge Prohibitions contained in the Basin Plan is also required as a condition of this WDR.
- L. Discharges of wastes in a manner, or to a location which have not been specifically regulated by waste discharge requirements of this WDR are prohibited.
- M. The discharge of any radiological, chemical, or biological warfare agent, or high level radiological waste is prohibited.
- N. The dumping or deposition, from shore, of oil, garbage, trash, or other solid municipal, industrial, or agricultural waste directly into waters subject to tidal action or adjacent to waters subject to tidal action in any manner which may permit it to be washed into waters subject to tidal action is prohibited.
- O. The dumping or deposition of chemical agents or explosives into waters subject to tidal action is prohibited.
- P. The discharge of copper from extracted groundwater to the Shelter Island Basin watershed or from the Shelter Island Basin watershed to San Diego Bay is prohibited.

- Q.** The discharge of Diazonon from extracted groundwater to Chollas Creek or from Chollas Creek to San Diego Bay is prohibited.

## V. Effluent Limitations and Discharge Specifications

### A. Effluent Limitations

#### 1. General / Inorganic / Biological

| No. | Parameter               | Units      | Effluent Limitations                    |      |      |                       |                |
|-----|-------------------------|------------|---|------|------|-----------------------|----------------|
|     |                         |            | AMEL                                    | AWEL | MDEL | Instantaneous Maximum | 6-Month Median |
| 1   | Settleable Solids       | ml/L       | 1.0*                                    | 1.5* | -    | 3.0*                  | -              |
| 2   | Total Suspended Solids  | mg/L       | 30*                                     | -    | -    | 50*                   | -              |
| 3   | Hydrogen Sulfide        | µg/L       | 2*                                      | -    | 4*   | 10*                   | -              |
| 4   | Total Residual Chlorine | µg/L       | -                                       | -    | 8*   | 60*                   | 2*             |
| 5   | Cyanide                 | µg/L       | 0.5*                                    | -    | 1.0* | -                     | -              |
| 6   | Acute Toxicity          | Tua        |   |      | 0.3  |                       |                |
| 7   | Chronic Toxicity        | Tuc        |   |      | 1.0  |                       |                |
| 8   | Total Coliform          | MPN/100 ml |   |      |      | 1000.0                |                |
| 9   | Fecal Coliform          | MPN/100 ml |   |      |      | 200.0                 |                |
| 10  | pH                      | Units      | Within limit of 6.0 to 9.0 at all times |      |      |                       |                |

\* Mass limit (lbs/d) = Effluent concentration Limit (mg/L) x Flow Limit (MGD) x 8.34 [lb\*L/(Mgal\*mg)]  
Mass limit (lbs/d) = Effluent concentration Limit (µg/L) x Flow Limit (MGD) x 0.00834 [lb\*L/(Mgal\*µg)]

| No. | Parameter             | Units | Effluent Limitations |      |      |                       |                |
|-----|-----------------------|-------|----------------------|------|------|-----------------------|----------------|
|     |                       |       | AMEL                 | AWEL | MDEL | Instantaneous Minimum | 6-Month Median |
| 11  | Dissolved Oxygen (DO) | mg/L  |                      |      |      | > 5.0                 |                |

## 2. Petroleum-Related

| No. | Parameter                    | Units | Effluent Limitations |      |      |                       |                |
|-----|------------------------------|-------|----------------------|------|------|-----------------------|----------------|
|     |                              |       | AMEL                 | AWEL | MDEL | Instantaneous Maximum | 6-Month Median |
| 12  | MTBE                         | µg/L  |                      |      |      | 5*                    |                |
| 13  | Benzene                      | µg/L  | -                    | -    | -    | 5*                    | -              |
| 14  | Ethylbenzene                 | µg/L  | -                    | -    | -    | 5*                    | -              |
| 15  | Toluene                      | µg/L  | -                    | -    | -    | 5*                    | -              |
| 16  | Xylene                       | µg/L  | -                    | -    | -    | 5*                    | -              |
| 17  | Total Petroleum Hydrocarbons | mg/L  | -                    | -    | -    | 0.5*                  | -              |

\* Mass limit (lbs/d) = Effluent concentration Limit (µg/L) x Flow Limit (MGD) x 0.00834 [lb\*L/(Mgal\*µg)]

## 3. Metals

| No. | Parameter             | Units | Effluent Limitations |      |         |                       |                |
|-----|-----------------------|-------|----------------------|------|---------|-----------------------|----------------|
|     |                       |       | AMEL                 | AWEL | MDEL    | Instantaneous Maximum | 6-Month Median |
| 18  | Arsenic               | µg/L  | 29.4*                | -    | 59.0*   | -                     | -              |
| 19  | Cadmium               | µg/L  | 7.6*                 | -    | 15.3*   | -                     | -              |
| 20  | Chromium (hexavalent) | µg/L  | 41.1*                | -    | 82.5*   | -                     | -              |
| 21  | Copper**              | µg/L  | 2.9*                 | -    | 5.8*    | -                     | -              |
| 22  | Lead                  | µg/L  | 7.0*                 | -    | 14.0*   | -                     | -              |
| 23  | Mercury               | µg/L  | 0.050*               | -    | 0.1005* | -                     | -              |
| 24  | Nickel                | µg/L  | 6.8*                 | -    | 13.6*   | -                     | -              |
| 25  | Silver                | µg/L  | 1.1*                 | -    | 2.2*    | -                     | -              |
| 26  | Tributyltin (TBT)     | µg/L  | 0.005*               |      |         |                       |                |
| 27  | Zinc                  | µg/L  | 47.3*                | -    | 95.0*   | -                     | -              |

\* Mass limit (lbs/d) = Effluent concentration Limit (µg/L) x Flow Limit (MGD) x 0.00834 [lb\*L/(Mgal\*µg)]

\*\* Copper discharge from the Shelter Island Basin watershed to San Diego Bay is prohibited.

## 4. Organics

| No. | Parameter                            | Units | Effluent Limitations |      |        |                       |                |
|-----|--------------------------------------|-------|----------------------|------|--------|-----------------------|----------------|
|     |                                      |       | AMEL                 | AWEL | MDEL   | Instantaneous Maximum | 6-Month Median |
| 28  | Phenolic Compounds (non-chlorinated) | µg/L  | -                    | -    | 120*   | 300*                  | 30*            |
| 29  | Chlorinated Phenolics                | µg/L  | 0.025*               | -    | 0.049* | 10*                   | 1*             |

| No. | Parameter                      | Units | Effluent Limitations  |      |      |                       |                |
|-----|--------------------------------|-------|-----------------------|------|------|-----------------------|----------------|
|     |                                |       | AMEL                  | AWEL | MDEL | Instantaneous Maximum | 6-Month Median |
| 30  | 1,1,2,2-tetrachlorethane (PCA) | µg/L  | 2.3*                  | -    | -    | -                     | -              |
| 31  | 1,1,1-trichloroethane (TCA)    | µg/L  | 5.4x10 <sup>5</sup> * | -    | -    | -                     | -              |
| 32  | 1,1,2-trichloroethane (TCA)    | µg/L  | 9.4*                  | -    | -    | -                     | -              |
| 33  | 1,2-dichloroethane             | µg/L  | 28*                   | -    | -    | -                     | -              |
| 34  | Tetrachloroethylene (PCE)      | µg/L  | 2.0*                  | -    | -    | -                     | -              |
| 35  | Trichloroethylene (TCE)        | µg/L  | 27*                   | -    | -    | -                     | -              |
| 36  | Vinyl chloride                 | µg/L  | 36*                   | -    | -    | -                     | -              |
| 37  | Carbon tetrachloride           | µg/L  | 0.90*                 | -    | -    | -                     | -              |
| 38  | Base/Neutral Organic Compounds | µg/L  |                       |      |      | 10*                   |                |

\* Mass limit (lbs/d) = Effluent concentration Limit (µg/L) x Flow Limit (MGD) x 0.00834 [lb\*L/(Mgal\*µg)]

Note: ml/L = milliliters per liter  
 mg/L = milligrams per liter  
 µg/L = micrograms per liter  
 TUa = acute toxicity units  
 TUc = chronic toxicity units  
 lbs/d = pounds per day  
 MGD = million gallons per day

## B. Land Discharge Specifications (Not Applicable)

## C. Reclamation Specifications (Not Applicable)

## VI. Receiving Water Limitations

### A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this WDR. The discharge of groundwater extraction waste from any site shall not, separately or jointly with any other discharge, cause violations of the following water quality objectives in San Diego Bay. These limitations apply unless more stringent provisions exist in either the Basin Plan, or an applicable State plan. The more stringent limitation shall apply.

## 1. Bacterial Characteristics

### a. Water-Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water-contact sports, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- (1) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).
- (2) The fecal coliform density based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

### b. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

The median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

## 2. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible.
- b. The discharge of waste shall not cause aesthetically undesirable discoloration of the surface of San Diego Bay.
- c. Natural light shall not be significantly reduced.
- d. The rate of deposition of solids and the characteristics of inert solids in San Diego Bay sediments shall not be changed such that benthic communities are degraded.

## 3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste materials.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- d. The concentration of substances set forth in the Discharge Specifications in marine sediments shall not be increased to levels which would degrade indigenous biota.

- e. The concentration of organic materials in San Diego Bay sediments shall not be increased to levels which would degrade marine life.
- f. Nutrient materials shall not cause objectionable aquatic growth or degrade indigenous biota.
- 4. Biological Characteristics
  - a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
  - b. The natural taste, odor, and color of fish, shellfish, or other aquatic resources used for human consumption shall not be altered.
  - c. The concentration of organic materials in fish, shellfish or other aquatic resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
- 5. Radioactivity  
Discharge of radioactive waste shall not degrade marine life.
- 6. Toxic Materials Limitations  
Since there is no dilution, toxic materials limits are the same as the effluent limits.

## **B. Groundwater Limitations (Not Applicable)**

## **VII. Provisions**

### **A. Standard Provisions**

- 1. The Discharger shall comply with all Standard Provisions included in Attachment D of this WDR.
- 2. Regional Board Standard Provisions. The Discharger shall comply with the following provisions:
  - a. The Discharger shall comply with all requirements and conditions of this WDR. Any WDR non-compliance constitutes a violation of the CWA and/or of the CWC and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of an application for permit renewal, modification, or reissuance.
  - b. The Discharger shall comply with all applicable federal, state, and local laws and regulations for handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner which causes or threatens to cause a condition of pollution, contamination or nuisance as those terms are defined in CWC 13050.
  - c. The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the CWA.
  - d. Any noncompliance with this WDR is a violation of the CWC and/or the CWA and is grounds for denial of an application for Order renewal or modification.

- e. No discharge of waste into waters of the state, whether or not the discharge is made pursuant to WDRs, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.
- f. For the purposes of this WDR, the term "permittee" used in parts of 40 CFR incorporated into this WDR by reference and/or applicable to this WDR shall have the same meaning as the term "Discharger" used elsewhere in this WDR.
- g. This WDR expires on October 10, 2012, after which, the terms and conditions of this WDR are automatically continued pending issuance of a new WDR, provided that all requirements of USEPA's NPDES regulations at 40 CFR 122.6 and the State's regulations at CCR Title 23, Section 2235.4 regarding the continuation of expired Orders and waste discharge requirements are met.
- h. Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this WDR will be considered confidential, and all such information and documents shall be available for review by the public at the office of the Regional Water Board.
- i. A copy of this WDR shall be maintained on-site at the Facility, and shall be available to Regional Water Board, State Water Board, and EPA personnel and/or their authorized representatives at all times.
- j. The Discharger shall comply with any interim limitations established by addendum, enforcement action, or revised waste discharge requirements that have been or may be adopted by the Regional Water Board.
- k. Failure to comply with provisions or requirements of this WDR, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- l. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, discharge specification, or receiving water limitation of this WDR, the Discharger shall notify the Regional Water Board by telephone (858) 467-2952 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent

recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

- m. The Discharger is required to retain records, including all monitoring information and copies of all reports required by this WDR, for five years unless directed otherwise by the Regional Board.
- n. This WDR may be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, receipt of USEPA guidance concerning regulated activities, judicial decision, or in accordance with 40 Code of Federal Regulations (CFR) 122.62, 122.63, 122.64, and 124.5.
- o. Enrollment in this WDR is temporary. The enrollee must re-enroll to be subject to the WDR. Dischargers enrolled in this WDR planning to discharge extracted groundwater waste after the expiration date of June 13, 2012 may be subject to new prohibitions or requirements based on the re-issuance of this WDR after June 13, 2012.
- p. The enrollee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this WDR and the Notice of Enrollment from the Regional Board, including such accelerated or additional monitoring as may be necessary to determine the nature, and effect of the noncomplying discharge.
- q. This WDR or the Notice of Enrollment from the Regional Board, may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
  - (1) Violation of any terms or conditions of this WDR or the Notice of Enrollment from the Regional Board;
  - (2) Obtaining enrollment in this WDR, or a Notice of Enrollment from the Regional Board, by misrepresentation or failure to disclose fully all relevant facts;
  - (3) A change in any condition that requires either a temporary or permanent reduction or elimination of the discharge subject to waste discharge requirements; or
  - (4) A finding that monitoring "indicator" pollutants listed in this WDR do not ensure compliance with water quality criteria or objectives for the pollutants expected to be represented by the "indicator" pollutants.
- r. The filing of a request by the enrollee for modification, revocation and reissuance, or termination of this WDR or an associated discharge Notice of Enrollment from the Regional Board, or a notification of planned change in or anticipated noncompliance with this WDR or discharge Notice of



Enrollment does not stay any condition of this WDR or the Notice of Enrollment from the Regional Board.

- s. Notwithstanding Provision 2.e above, if any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this WDR, the Regional Board may institute proceedings under these regulations to modify or revoke and reissue this WDR to conform to the toxic effluent standard or prohibition.
- t. In addition to any other grounds specified herein, this WDR or an Notice of Enrollment from the Regional Board shall be modified or revoked at any time if, on the basis of any data, the Regional Board determines that continued discharges may cause unreasonable degradation of the aquatic environment.
- u. The Regional Board or the Director of the USEPA may require any person requesting enrollment under this WDR or subject to waste discharge requirements under this WDR to apply for and obtain an individual NPDES permit. Cases where an individual NPDES permit may be required include but are not limited to those described in 40 CFR 122.28 (b)(3)(i) and (b)(3)(ii), and where the volume of a discharge exceeds 10 million gallons per year, or the duration of a discharge exceeds 3 years.
- v. It shall not be a defense for the enrollee in an enforcement action that effluent limitation violations are a result of analytical variability rendering the results inaccurate. The validity of the testing results, whether or not the enrollee has monitored or sampled more frequently than required by this WDR, shall not be a defense to an enforcement action.
- w. A copy of this WDR, and the Notice of Enrollment from the Regional Board shall be posted at a prominent location at or near the enrollee's facility, and shall be available to operating personnel at all times.
- x. The enrollee shall take all reasonable steps to minimize or prevent any discharge in violation of this WDR which has a reasonable likelihood of adversely affecting human health or the environment.
- y. For the purposes of this WDR, the term permit, general permit, and order, shall have the same meaning as the term WDR used elsewhere in this WDR.

## **B. Monitoring and Reporting Program Requirements**

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this WDR.

### **C. Special Provisions**

1. Reopener Provisions (Not Applicable)
2. Special Studies, Technical Reports and Additional Monitoring Requirements (Not Applicable)
3. Best Management Practices and Pollution Prevention Plan (Not Applicable)
4. Compliance Schedules (Not Applicable)
5. Construction, Operation and Maintenance Specifications (Not Applicable)
6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)
7. Other Special Provisions

The Dischargers shall dispose of solids removed from liquid wastes in a manner that is consistent with Title 27 of the CCR and approved by the Regional Board.

8. Order No. R9-2007-0034 may be modified by the Regional Board and EPA to enable the discharger to participate in comprehensive regional monitoring activities conducted in the Southern California Bight during the term of this permit. The intent of regional monitoring activities is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled scientific resources of the region. During these coordinated sampling efforts, the discharger's sampling and analytical effort may be reallocated to provide a regional assessment of the impact of the discharge of municipal wastewater to the Southern California Bight. Anticipated modifications to the monitoring program will be coordinated so as to provide a more comprehensive picture of the ecological and statistical significance of monitoring results and to determine cumulative impacts of various pollution sources. If predictable relationships among the biological, water quality and effluent monitoring variables can be demonstrated, it may be appropriate to decrease the discharger's sampling effort. Conversely, the monitoring program may be intensified if it appears that the objectives cannot be achieved through the discharger's existing monitoring program. These changes will improve the overall effectiveness of monitoring in the Southern California Bight. Minor changes may be made without further public notice.

### **VIII. Compliance Determination**

Compliance with the effluent limitations contained in Section IV of this WDR will be determined as specified below:

#### **A. Average Monthly Effluent Limitation (AMEL)**

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will

be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**B. Average Weekly Effluent Limitation (AWEL)**

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in seven days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**C. Maximum Daily Effluent Limitation (MDEL)**

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period. For any one day during which no sample is taken, no compliance determination can be made for that day.

**D. Instantaneous Minimum Effluent Limitation**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

**E. Instantaneous Maximum Effluent Limitation**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

#### **F. Six-Month Median Effluent Limitation**

The Discharger shall determine the six-month median effluent value (SMEV) for a given parameter by calculating the statistical median of all daily effluent values (DEVs) for each parameter within each six-month calendar period (January-June and July-December). The SMEV determination for a given six-month calendar period shall not include DEVs from any other six-month calendar period. If only a single DEV is obtained for a parameter during a six-month calendar period, that DEV shall be considered the SMEV for that parameter for that given six-month calendar period. The SMEV shall be attributed to each day of the six-month calendar period for determination of compliance with the six-month median effluent limitation (SMEL) for a given parameter for each day of that given six-month calendar period, resulting in approximately 180 days of non-compliance depending on the number of days in the six-month calendar period. If the SMEV exceeds the six-month median, the Discharger will be considered out of compliance for each day for the six-month period. The SMEV cannot be determined for any six month calendar period during which no DEV is obtained.

## Attachment A – Definitions

**Arithmetic Mean ( $\mu$ ),** also called the average: the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean =  $\mu = \Sigma x / n$       where:  $\Sigma x$  is the sum of the measured ambient water concentrations, and  $n$  is the number of samples.

**Average Monthly Effluent Limitation (AMEL):** the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Bioaccumulative Pollutants:** those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

**Carcinogenic Pollutants:** substances that are known to cause cancer in living organisms.

**Coefficient of Variation (CV):** a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

**Cone of Depression:** A depression in the water table that develops around a pumped well.

**Cone of Influence:** The depression, roughly conical in shape, produced in a water table by the pumping of water from a well.

**Contamination Site:** A site that is currently under investigation or cleanup for any medium (air, soil, water), or is provided oversight by any local, state, or federal environmental regulatory agency, such as the County of San Diego, Air Pollution Control District, and Department of Toxics Substance Control, or the quality of surface water or groundwater at a site has been altered by wastes to a degree which unreasonably affects either the waters for beneficial uses or facilities which serve these beneficial uses.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12 a.m. through 11:59 p.m.) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a

constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day, or other 24-hour period defined as a day), or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if one day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

**Detected, but Not Quantified (DNQ):** those sample results less than the Reporting Level (RL), but greater than or equal to the laboratory's Method Detection Limit (MDL).

**Dilution Credit:** the amount of dilution granted to a Discharger in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio, or determined through conducting a mixing zone study, or modeling of the discharge and receiving water.

**Effluent Concentration Allowance (ECA):** a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Enclosed Bays:** indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

**Notice of Enrollment:** A notice from the Regional Board to the discharger that the NOI application has been accepted and the project is enrolled in this WDR. The Notice of Enrollment will specify the discharge flow limit, any additional or increase in monitoring due to specific circumstances of the discharge, or other requirements.

**Estimated Chemical Concentration:** the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the Minimum Level value.

**Estuaries:** waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered

estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

**Inland Surface Waters:** all surface waters of the State that do not include the ocean, enclosed bays, or estuaries. Inland surface water consist of freshwater and do not have any measurable salinity.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

**Maximum Daily Effluent Limitation (MDEL):** the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

**Median:** the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

**Method Detection Limit (MDL):** the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

**Minimum Level (ML):** the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

**Mixing Zone:** a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

**Not Detected (ND):** those sample results less than the laboratory's MDL.

**Notice of Intent (NOI):** A form completed and signed by a Discharger notifying the Regional Board that the Discharger is applying for enrollment under the terms and conditions of the WDR and will comply with the WDR for a groundwater extraction activity at a specific site.

**Notice of Termination (NOT):** A letter completed and signed by a Discharger notifying the Regional Board that the Discharger no longer wishes to discharge under the WDR. Submission of a NOT constitutes notice that the owner (and his/her agent) of the site identified on the letter has ceased discharge groundwater associated with groundwater extraction activities at the site under this WDR.

**Ocean Waters:** the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Board's California Ocean Plan.

**Permanent groundwater extraction activities:** Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s).

**Persistent pollutants:** substances for which degradation or decomposition in the environment is nonexistent or very slow.

**Radius of Influence:** The radial distance from the center of a wellbore to the point where there is no lowering of the water table or potentiometric surface (the edge of the cone of depression).

**Reporting Level (RL):** the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this WDR. The MLs included in this WDR correspond to approved analytical methods for reporting a sample result that are selected by the Regional Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP, or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

**Satellite Collection System:** the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

**Six-Month Median Effluent Limitation:** the highest allowable median of all daily discharges, based on 24-hour flow-weighted composite samples, for any 180-day period.



**Source of Drinking Water:** any water designated as municipal or domestic supply (MUN) in a Regional Board Basin Plan.

**Standard Deviation ( $\sigma$ ):** a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

$\mu$  is the arithmetic mean of the observed values; and

n is the number of samples.

**Temporary Discharge:** Discharge of extracted groundwater waste from groundwater cleanup with a projected cleanup date and subsurface excavation that requires groundwater extraction that is not a permanent groundwater extraction activity.

Discharges of groundwater for the purpose of protecting subterranean structures from groundwater infiltration are not considered groundwater cleanup projects, whether or not such discharges cleanup or remove pollutants from the groundwater. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water (CAG990002).

**Toxicity Reduction Evaluation (TRE):** a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical[s] responsible for toxicity. These procedures are performed in three phases [characterization, identification, and confirmation] using aquatic organism toxicity tests.)

**Waters of the United States or waters of the U.S.:** (40 e-CFR 122.2, March 20, 2007) (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial sea; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in

paragraphs (a) through (f) of this definition. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Attachment B1 – Notice of Intent Form

## NOTICE OF INTENT

### TO DISCHARGE GROUNDWATER EXTRACTION WASTE TO WATERS OF SAN DIEGO BAY SUBJECT TO GENERAL WASTE DISCHARGE REQUIREMENTS IN ORDER NO. R9-2007-0034 (NPDES NO. CAG919001)

GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM  
TEMPORARY GROUNDWATER EXTRACTION AND SIMILAR WASTE DISCHARGES  
TO SAN DIEGO BAY, TRIBUTARIES THERETO UNDER TIDAL INFLUENCE, AND  
STORM DRAINS OR OTHER CONVEYANCE SYSTEMS TRIBUTARY THERETO  
(WDR)

Attach Form 200 (completed and signed) and additional sheets as necessary to provide  
complete information requested in this Notice of Intent (NOI).

#### I. STIPULATION OF APPLICABILITY AND CERTIFICATION

- ☐ I have determined that the groundwater extracted waste discharge will be to navigable waters of the United States within the San Diego Region (i.e. San Diego Bay, tributaries thereto under tidal influence, and storm drains or other conveyance systems tributary thereto) and that any violation of effluent limits will be subject to Mandatory Minimum Penalties under California Water Code section 13385(h) and (i).
- ☐ I have determined that this discharge is eligible for enrollment in this General "Waste Discharge Requirements" (WDR) because the discharge is a temporary discharge, unless exempt and the discharge will comply with the Discharge Specifications of this WDR.
- ☐ I have read this WDR Order No. R9-2007-0034 and hereby certify that:
1. I understand the requirements of Order No. R9-2007-0034.
  2. The enclosed information describing my proposed groundwater extraction waste discharge is accurate and describes a discharge that meets the requirements of Order No. R9-2007-0034, which is the applicable general groundwater extraction waste discharge permit.
  3. I will comply with all terms, conditions, and requirements of WDR Order No. R9-2007-0034.

## I. STIPULATION OF APPLICABILITY AND CERTIFICATION

I certify under penalty of law that this document, Form 200, and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the criteria for eligibility will be complied with.

A. Printed Name:

B. Signature\*:

C. Date:

D. Title:

\*Certification by the owner of the facility or the operator of the facility, if the operator is different from the owner, is required. The appropriate person must sign the application form.

Acceptable signatures are:

1. for a corporation, a principal executive officer of at least the level of senior vice-president;
2. for a partnership or individual (sole proprietorship), a general partner or the proprietor;
3. for a governmental or public agency, either a principal executive officer or ranking elected/appointed official.

## II. ITEMS REQUIRED FOR DETERMINING ELIGIBILITY

- ☐ A. Identify and discuss technical and economic feasibility of alternative disposal options.
- ☐ B. If discharging to an MS4, obtain authorization from the appropriate municipality and submit proof.
- ☐ C. Submit scale appropriate vicinity map(s).
- ☐ D. Submit a completed and signed Form 200 (*Application/Report of Waste Discharge, General Information for Waste Discharge Requirements or NPDES Permit*).

### III. NOTICE OF INTENT STATUS

A. Is this a renewal of an expiring WDR? 1. ☐ No 2. ☐ Yes, Order No.: \_\_\_\_\_

### IV. GROUNDWATER EXTRACTION INFORMATION

A. Nature of Groundwater Extraction Activity:

1. ☐ Subsurface Excavation  
a. ☐ Foundation b. ☐ Tunneling c. ☐ Construction d. ☐ Footing e. ☐ Other \_\_\_\_\_
2. ☐ Remediation Project
3. ☐ Other \_\_\_\_\_

B. ☐ This project is associated with a project that requires Regional Board license, permit, or oversight?  
Explain: Construction storm water, 401 Certifications, WDR, UST or cleanup project, etc.

C. Duration and Start Date

1. Proposed Start Date of Groundwater Extraction Discharge: \_\_\_\_\_
2. Estimated Duration of Groundwater Extraction Discharge: \_\_\_\_\_

D. 1. ☐ Describe the historical use of the land within the cone/radius of influence.

2. ☐ Identify all known contamination sites and ground water plumes within half mile of each groundwater extraction points to be used in the project.  
Attach a source description and list of constituents.  
Attach site assessment (If one has been done)

E. For each discharge point identify the location of discharge according to the following: (show in vicinity map)

1. ☐ Storm Drain, ☐ Attach proof of authorization from the appropriate municipality for the discharge into the storm drain or conveyance used to convey the discharge.
2. ☐ Directly into San Diego Bay, ☐ submerged or ☐ on the surface
3. ☐ Freshwater Tributary of San Diego Bay. Distance to San Diego Bay \_\_\_\_\_
4. Salinity of the Tributary at the discharge point \_\_\_\_\_

F. Will treatment be required to meet the Discharge Specifications of this WDR?

1. ☐ Yes 2. ☐ No
- If Yes, attach the following:
- a. ☐ A report certifying the adequacy of each component of the treatment facilities or other type of contingency plan. The report shall also certify that:
- (1) ☐ all treatment facility startup and operation instruction manuals are adequate and available to operating personnel,
  - (2) ☐ adequate treatment facility maintenance and testing (if treatment facilities are on "standby") schedules are included in the treatment facility operations manual,
  - (3) ☐ treatment facilities and appurtenances can be fully operational, as designed, within 24 hours, and
  - (4) ☐ influent and effluent sampling locations or ports are located in areas where samples representative of the waste stream to be monitored can be obtained.
- b. ☐ The design engineer shall affix his/her signature and engineering license number to this certification report.

G. Additional Attachments

1. ☐ Describe best management practices (bmp) and contingency plan.
2. ☐ Provide the results of the analysis of the groundwater to be extracted for all of those constituents, as determined by the sampling requirement criteria described in this WDR, for the proposed receiving water type.

## V. RECEIVING WATER INFORMATION

A. Name of receiving water(s): (San Diego Bay, Chollas Creek, Sweetwater River, etc.)

B. Describe the types of receiving waters affected: (bay, creek, river, etc.)

C. Receiving water flows seasonally 1. ☐ Yes 2. ☐ No

D. More than one discharge point is proposed?

1. ☐ Yes 2. ☐ No If Yes, how many? \_\_\_\_\_

And distance between points \_\_\_\_\_

Include in Vicinity Map

3. Location of Discharge Points: (attach)

Example: Outfall 001 (Latitude and Longitude)

E. Proposed Flow (MGD or gpd) of the discharge:

1. Maximum Discharge: \_\_\_\_\_

2. Average Daily Flowrate: \_\_\_\_\_

3. Basis for flow rate estimates (if necessary attach):

F. Hydrologic Subarea Number(s) at the point of discharge:

## VI. APPLICATION FEE

The initial fee and annual fee are based upon the type of pollutants to be discharged or potentially discharged.

Make checks payable to "SWRCB" and include the project's name in the "memo" field.

☐ **Category 3 Lowest Threat to Water Quality**

The discharge will not require any treatment.

Current fee is \$1,000 plus \$185 surcharge = \$1,185

☐ **Category 2 Moderate Threat to Water Quality**

The discharge will be from a well that has a contaminated site within the radius of influence.

Current fee is \$2,900 plus \$537 surcharge = \$3,437

☐ **Category 1 Highest Threat to Water Quality**

The discharge will require treatment to meet effluent limits.

Current fee is \$4,800 plus \$888 surcharge = \$5,688

## VIII. ANTIDEGREDATION POLICIES

- A. ☐ Statement of compliance with 40 CFR 131.12 and State Water Resources Control Board Resolution No. 68-16 (attach) (collectively antidegradation policies)

### 40 CFR 131.12 Antidegradation policy.

(a) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully.

Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

(3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

(4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.

### RESOLUTION NO. 68-16

#### STATEMENT OF POLICY WITH RESPECT TO MAINTAINING HIGH QUALITY OF WATERS IN CALIFORNIA

WHEREAS the California Legislature has declared that it is the policy of the State that the granting of permits and licenses for unappropriated water and the disposal of wastes into the waters of the State shall be so regulated as to achieve highest water quality consistent with maximum benefit to the people of the State and shall be controlled so as to promote the peace, health, safety and welfare of the people of the State; and

WHEREAS water quality control policies have been and are being adopted for waters of the State; and

WHEREAS the quality of some waters of the State is higher than that established by the adopted policies and it is the intent and purpose of this Board that such higher quality shall be maintained to the maximum extent possible consistent with the declaration of the Legislature;

#### NOW, THEREFORE, BE IT RESOLVED:

1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.

2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur, and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

3. In implementing this policy, the Secretary of the Interior will be kept advised and will be provided with such information as he will need to discharge his responsibilities under the Federal Water Pollution Control Act.

BE IT FURTHER RESOLVED that a copy of this resolution be forwarded to the Secretary of the Interior as part of California's water quality control policy submission.

#### CERTIFICATION

The undersigned, Executive Officer of the State Water Resources Control Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on October 24, 1968.

Dated: October 28, 1968

Kerry W. Mulligan, Executive Officer  
State Water Resources Control Board

## IX. CALIFORNIA CONSTITUTION COMPLIANCE

- A. ☐ Discuss the potential uses of the extracted groundwaters, efforts made to ensure use to the fullest extent possible and compliance with Article 10, Section 2 of the California Constitution (attach)

### CALIFORNIA CONSTITUTION

#### ARTICLE 10 WATER

SEC. 2. It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water. Riparian rights in a stream or water course attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purposes for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses; provided, however, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of water of the stream to which the owner's land is riparian under reasonable methods of diversion and use, or as depriving any appropriator of water to which the appropriator is lawfully entitled.

This section shall be self-executing, and the Legislature may also enact laws in the furtherance of the policy in this section contained.

Submit the NOI, first annual fee, map, and other attachments to the following address:

CRWQCB – San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

Attn: Groundwater Extraction to San Diego Bay  
Southern Core Regulatory Unit  
NOTICE OF INTENT



**X. STATE USE ONLY**

|                     |                         |  |
|---------------------|-------------------------|--|
| WDID:               | Staff Initials:         | Status: <input type="checkbox"/> Complete<br><input type="checkbox"/> Incomplete<br><input type="checkbox"/> Withdrawn |
| Date NOI Received:  | Check #:                |  |
| Date NOI Processed: | Fee Amount Received: \$ |  |
| Comments:           |                         |  |
|                     |                         |  |
|                     |                         |  |
|                     |                         |  |
|                     |                         |  |
|                     |                         |  |

Attachment B2 – Priority Toxic Pollutants

Source: [65 FR 31711, May 18, 2000, as amended at 66 FR 9961, Feb. 13, 2001; 68 FR 62747, Nov. 6, 2003]

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
Numeric criteria for priority toxic pollutants for the State of California

| A                              |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|--------------------------------|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                     | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>d</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>d</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>d</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>d</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 1. Antimony                    | 7440360       |  |   |  |   | 14 a,s  | 4300 a,i                          |
| 2. Arsenic <sup>b</sup>        | 7440382       | 340 i,m,w  | 150 i,m,w   | 69 i,m   | 36 i,m  |   |                                   |
| 3. Beryllium                   | 7440417       |  |   |  |   | n   | n                                 |
| 4. Cadmium <sup>b</sup>        | 7440439       | 4.3 e,i,m,w,x                                    | 2.2 e,i,m,w   | 42 i,m   | 9.3 i,m   | n   | n                                 |
| 5a. Chromium (III)             | 16065831      | 550 e,i,m,o                                      | 180 e,i,m,o   |  |   | n   | n                                 |
| 5b. Chromium (VI) <sup>b</sup> | 18540299      | 16 i,m,w   | 11 i,m,w  | 1100 i,m   | 50 i,m  | n   | n                                 |
| 6. Copper <sup>b</sup>         | 7440508       | 13 e,i,m,w,x                                     | 9.0 e,i,m,w   | 4.8 i,m  | 3.1 i,m   | 1300  |                                   |
| 7. Lead <sup>b</sup>           | 7439921       | 65 e,i,m   | 2.5 e,i,m   | 210 i,m  | 8.1 i,m   | n   | n                                 |
| 8. Mercury <sup>b</sup>        | 7439976       | [Reserved]                                       | [Reserved]  | [Reserved]                                       | [Reserved]  | 0.050 a   | 0.051 a                           |
| 9. Nickel <sup>b</sup>         | 7440020       | 470 e,i,m,w                                      | 52 e,i,m,w  | 74 i,m   | 8.2 i,m   | 610 a   | 4600 a                            |
| 10. Selenium <sup>b</sup>      | 7782492       | [Reserved] p                                     | 5.0 q   | 290 i,m  | 71 i,m  | n   | n                                 |
| 11. Silver <sup>b</sup>        | 7440224       | 3.4 e,i,m  |   | 1.9 i,m  |   |   |                                   |
| 12. Thallium                   | 7440280       |  |   |  |   | 1.7 a,s   | 6.3 a,i                           |
| 13. Zinc <sup>b</sup>          | 7440666       | 120<br>e,i,m,w,x                                 | 120 e,i,m,w   | 90 i,m   | 81 i,m  |   |                                   |
| 14. Cyanide <sup>b</sup>       | 57125         | 22 o   | 5.2 o   | 1 r  | 1 r   | 700 a   | 220,000 a,j                       |
| 15. Asbestos                   | 1332214       |  |   |  |   | 7,000,000<br>fibers/L, k,s  |                                   |
| 16. 2,3,7,8-TCDD (Dioxin)      | 1746016       |  |   |  |   | 0.000000013<br>c  | 0.000000014<br>c                  |
| 17. Acrolein                   | 107028        |  |   |  |   | 320 s   | 780 t                             |
| 18. Acrylonitrile              | 107131        |  |   |  |   | 0.059 a,c,s   | 0.66 a,c,t                        |
| 19. Benzene                    | 71432         |  |   |  |   | 1.2 a,c   | 71 a,c                            |
| 20. Bromoform                  | 75252         |  |   |  |   | 4.3 a,c   | 360 a,c                           |
| 21. Carbon Tetrachloride       | 56235         |  |   |  |   | 0.25 a,c,s  | 4.4 a,c,t                         |
| 22. Chlorobenzene              | 108907        |  |   |  |   | 680 a,s   | 21,000 a,j,i                      |
| 23. Chlorodibromomethane       | 124481        |  |   |  |   | 0.401 a,c   | 34 a,c                            |
| 24. Chloroethane               | 75003         |  |   |  |   |   |                                   |
| 25. 2-Chloroethylvinyl Ether   | 110758        |  |   |  |   |   |                                   |

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
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| A                              |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|--------------------------------|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                     | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>d</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>d</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>d</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>d</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 26. Chloroform                 | 67663         |  |   |  |   | [Reserved]  | [Reserved]                        |
| 27. Dichlorobromomethane       | 75274         |  |   |  |   | 0.56 a,c  | 46 a,c                            |
| 28. 1,1-Dichloroethane         | 75343         |  |   |  |   |   |                                   |
| 29. 1,2-Dichloroethane         | 107062        |  |   |  |   | 0.38 a,c,s  | 99 a,c,t                          |
| 30. 1,1-Dichloroethylene       | 75354         |  |   |  |   | 0.057 a,c,s   | 3.2 a,c,t                         |
| 31. 1,2-Dichloropropane        | 78875         |  |   |  |   | 0.52 a  | 39 a                              |
| 32. 1,3-Dichloropropylene      | 542756        |  |   |  |   | 10 a,s  | 1,700 a,t                         |
| 33. Ethylbenzene               | 100414        |  |   |  |   | 3,100 a,s   | 29,000 a,t                        |
| 34. Methyl Bromide             | 74839         |  |   |  |   | 48 a  | 4,000 a                           |
| 35. Methyl Chloride            | 74873         |  |   |  |   | n   | n                                 |
| 36. Methylene Chloride         | 75092         |  |   |  |   | 4.7 a,c   | 1,600 a,c                         |
| 37. 1,1,2,2-Tetrachloroethane  | 79345         |  |   |  |   | 0.17 a,c,s  | 11 a,c,t                          |
| 38. Tetrachloroethylene        | 127184        |  |   |  |   | 0.6 c,s   | 8.85 c,t                          |
| 39. Toluene                    | 108883        |  |   |  |   | 6,800 a   | 200,000 a                         |
| 40. 1,2-Trans-Dichloroethylene | 156605        |  |   |  |   | 700 a   | 140,000 a                         |
| 41. 1,1,1-Trichloroethane      | 71556         |  |   |  |   | n   | n                                 |
| 42. 1,1,2-Trichloroethane      | 79005         |  |   |  |   | 0.60 a,c,s  | 42 a,c,t                          |
| 43. Trichloroethylene          | 79016         |  |   |  |   | 2.7 c,s   | 81 c,t                            |
| 44. Vinyl Chloride             | 75014         |  |   |  |   | 2 c,s   | 525 c,t                           |
| 45. 2-Chlorophenol             | 95578         |  |   |  |   | 120 a   | 400 a                             |
| 46. 2,4-Dichlorophenol         | 120832        |  |   |  |   | 93 a,s  | 790 a,t                           |
| 47. 2,4-Dimethylphenol         | 105679        |  |   |  |   | 540 a   | 2,300 a                           |
| 48. 2-Methyl-4,6-Dinitrophenol | 534521        |  |   |  |   | 13.4 s  | 765 t                             |
| 49. 2,4-Dinitrophenol          | 51285         |  |   |  |   | 70 a,s  | 14,000 a,t                        |
| 50. 2-Nitrophenol              | 88755         |  |   |  |   |   |                                   |
| 51. 4-Nitrophenol              | 100027        |  |   |  |   |   |                                   |
| 52. 3-Methyl-4-Chlorophenol    | 59507         |  |   |  |   |   |                                   |
| 53. Pentachlorophenol          | 87865         | 19 f,w   | 15 f,w  | 13   | 7.9   | 0.28 a,c  | 8.2 a,c,j                         |
| 54. Phenol                     | 108952        |  |   |  |   | 21,000 a  | 4,600,000<br>a,j,l                |
| 55. 2,4,6-Trichlorophenol      | 68062         |  |   |  |   | 2.1 a,c   | 6.5 a,c                           |
| 56. Acenaphthene               | 83329         |  |   |  |   | 1,200 a   | 2,700 a                           |
| 57. Acenaphthylene             | 208968        |  |   |  |   |   |                                   |
| 58. Anthracene                 | 120127        |  |   |  |   | 9,600 a   | 110,000 a                         |

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
Numeric criteria for priority toxic pollutants for the State of California

| A                               |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|---------------------------------|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                      | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 59. Benzidine                   | 92875         |  |   |  |   | 0.00012 a,c,s   | 0.00054 a,c,t                     |
| 60. Benzo(a)Anthracene          | 56553         |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 61. Benzo(a)Pyrene              | 50328         |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 62. Benzo(b)Fluoranthene        | 205992        |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 63. Benzo(ghi)Perylene          | 191242        |  |   |  |   |   |                                   |
| 64. Benzo(k)Fluoranthene        | 207089        |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 65. Bis(2-Chloroethoxy)Methane  | 111911        |  |   |  |   |   |                                   |
| 66. Bis(2-Chloroethyl)Ether     | 111444        |  |   |  |   | 0.031 a,c,s   | 1.4 a,c,t                         |
| 67. Bis(2-Chloroisopropyl)Ether | 39638329      |  |   |  |   | 1,400 a   | 170,000 a,t                       |
| 68. Bis(2-Ethylhexyl)Phthalate  | 117817        |  |   |  |   | 1.8 a,c,s   | 5.9 a,c,t                         |
| 69. 4-Bromophenyl Phenyl Ether  | 101553        |  |   |  |   |   |                                   |
| 70. Butylbenzyl Phthalate       | 85687         |  |   |  |   | 3,000 a   | 5,200 a                           |
| 71. 2-Chloronaphthalene         | 91587         |  |   |  |   | 1,700 a   | 4,300 a                           |
| 72. 4-Chlorophenyl Phenyl Ether | 7005723       |  |   |  |   |   |                                   |
| 73. Chrysene                    | 218019        |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 74. Dibenzo(a,h)Anthracene      | 53703         |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 75. 1,2 Dichlorobenzene         | 95501         |  |   |  |   | 2,700 a   | 17,000 a                          |
| 76. 1,3 Dichlorobenzene         | 541731        |  |   |  |   | 400   | 2,600                             |
| 77. 1,4 Dichlorobenzene         | 106467        |  |   |  |   | 400   | 2,600                             |
| 78. 3,3'-Dichlorobenzidine      | 91941         |  |   |  |   | 0.04 a,c,s  | 0.077 a,c,t                       |
| 79. Diethyl Phthalate           | 84682         |  |   |  |   | 23,000 a,s  | 120,000 a,t                       |
| 80. Dimethyl Phthalate          | 131113        |  |   |  |   | 313,000 s   | 2,900,000 t                       |
| 81. Di-n-Butyl Phthalate        | 84742         |  |   |  |   | 2,700 a,s   | 12,000 a,t                        |
| 82. 2,4-Dinitrotoluene          | 121142        |  |   |  |   | 0.11 c,s  | 9.1 c,t                           |
| 83. 2,6-Dinitrotoluene          | 606202        |  |   |  |   |   |                                   |
| 84. Di-n-Octyl Phthalate        | 117840        |  |   |  |   |   |                                   |
| 85. 1,2-Diphenylhydrazine       | 122667        |  |   |  |   | 0.040 a,c,s   | 0.54 a,c,t                        |
| 86. Fluoranthene                | 206440        |  |   |  |   | 300 a   | 370 a                             |
| 87. Fluorene                    | 86737         |  |   |  |   | 1,300 a   | 14,000 a                          |
| 88. Hexachlorobenzene           | 118741        |  |   |  |   | 0.00075 a,c   | 0.00077 a,c                       |
| 89. Hexachlorobutadiene         | 87683         |  |   |  |   | 0.44 a,c,s  | 50 a,c,t                          |
| 90. Hexachlorocyclopentadiene   | 77474         |  |   |  |   | 240 a,s   | 17,000 a,t                        |
| 91. Hexachloroethane            | 67721         |  |   |  |   | 1.9 a,c,s   | 8.9 a,c,t                         |

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
Numeric criteria for priority toxic pollutants for the State of California

| A   |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|---|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                                | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>e</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>e</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>e</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>e</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 92. Indeno(1,2,3-cd) Pyrene               | 193395        |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 93. Isophorone                            | 78591         |  |   |  |   | 5.4 c,s   | 600 c,t                           |
| 94. Naphthalene                           | 91203         |  |   |  |   |   |                                   |
| 95. Nitrobenzene                          | 98953         |  |   |  |   | 17 a,s  | 1,900 a,j,t                       |
| 96. N-Nitrosodimethylamine                | 62759         |  |   |  |   | 0.00069 a,c,s   | 8.1 a,c,t                         |
| 97. N-Nitrosodi-n-Propylamine             | 621647        |  |   |  |   | 0.005 a   | 1.4 a                             |
| 98. N-Nitrosodiphenylamine                | 86306         |  |   |  |   | 5.0 a,c,s   | 16 a,c,t                          |
| 99. Phenanthrene                          | 85018         |  |   |  |   |   |                                   |
| 100. Pyrene                               | 129000        |  |   |  |   | 960 a   | 11,000 a                          |
| 101. 1,2,4-Trichlorobenzene               | 120821        |  |   |  |   |   |                                   |
| 102. Aldrin                               | 309002        | 3 g  |   | 1.3 g  |   | 0.00013 a,c   | 0.00014 a,c                       |
| 103. alpha-BHC                            | 319846        |  |   |  |   | 0.0039 a,c  | 0.013 a,c                         |
| 104. beta-BHC                             | 319857        |  |   |  |   | 0.014 a,c   | 0.046 a,c                         |
| 105. gamma-BHC                            | 58899         | 0.95 w   |   | 0.16 g   |   | 0.019 c   | 0.063 c                           |
| 106. delta-BHC                            | 319868        |  |   |  |   |   |                                   |
| 107. Chlordane                            | 57749         | 2.4 g  | 0.0043 g  | 0.09 g   | 0.004 g   | 0.00057 a,c   | 0.00059 a,c                       |
| 108. 4,4'-DDT                             | 50293         | 1.1 g  | 0.001 g   | 0.13 g   | 0.001 g   | 0.00059 a,c   | 0.00059 a,c                       |
| 109. 4,4'-DDE                             | 72559         |  |   |  |   | 0.00059 a,c   | 0.00059 a,c                       |
| 110. 4,4'-DDD                             | 72548         |  |   |  |   | 0.00083 a,c   | 0.00084 a,c                       |
| 111. Dieldrin                             | 60571         | 0.24 w   | 0.056 w   | 0.71 g   | 0.0019 g  | 0.00014 a,c   | 0.00014 a,c                       |
| 112. alpha-Endosulfan                     | 959988        | 0.22 g   | 0.056 g   | 0.034 g  | 0.0087 g  | 110 a   | 240 a                             |
| 113. beta-Endosulfan                      | 33213659      | 0.22 g   | 0.056 g   | 0.034 g  | 0.0087 g  | 110 a   | 240 a                             |
| 114. Endosulfan Sulfate                   | 1031076       |  |   |  |   | 110 a   | 240 a                             |
| 115. Endrin                               | 72208         | 0.086 w  | 0.036 w   | 0.037 g  | 0.0023 g  | 0.76 a  | 0.81 a,j                          |
| 116. Endrin Aldehyde                      | 7421934       |  |   |  |   | 0.76 a  | 0.81 a,j                          |
| 117. Heptachlor                           | 76448         | 0.52 g   | 0.0038 g  | 0.053 g  | 0.0036 g  | 0.00021 a,c   | 0.00021 a,c                       |
| 118. Heptachlor Epoxide                   | 1024573       | 0.52 g   | 0.0038 g  | 0.053 g  | 0.0036 g  | 0.00010 a,c   | 0.00011 a,c                       |
| 119-125. Polychlorinated biphenyls (PCBs) |               |  | 0.014 u   |  | 0.03 u  | 0.00017 c,v   | 0.00017 c,v                       |
| 126. Toxaphene                            | 8001352       | 0.73   | 0.0002  | 0.21   | 0.0002  | 0.00073 a,c   | 0.00075 a,c                       |
| Total Number of Criteria <sup>b</sup>     |               | 22   | 21  | 22   | 20  | 92  | 90                                |

## Footnotes to

### Table in paragraph(b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS:

- a. Criteria revised to reflect the Agency q1\* or RfD, as contained in the Integrated Risk Information System (IRIS) as of October 1, 1996. The fish tissue bioconcentration factor (BCF) from the 1980 documents was retained in each case.
- b. Criteria apply to California waters except for those waters subject to objectives in Tables III-2A and III-2B of the San Francisco Regional Water Quality Control Board's (SFRWQCB) 1986 Basin Plan that were adopted by the SFRWQCB and the State Water Resources Control Board, approved by EPA, and which continue to apply. For copper and nickel, criteria apply to California waters except for waters south of Dumbarton Bridge in San Francisco Bay that are subject to the objectives in the SFRWQCB's Basin Plan as amended by SFRWQCB Resolution R2-2002-0061, dated May 22, 2002, and approved by the State Water Resources Control Board. EPA approved the aquatic life site-specific objectives on January 21, 2003. The copper and nickel aquatic life site-specific objectives contained in the amended Basin Plan apply instead.
- c. Criteria are based on carcinogenicity of 10 (-6) risk.
- d. Criteria Maximum Concentration (CMC) equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects. Criteria Continuous Concentration (CCC) equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. ug/L equals micrograms per liter.
- e. Freshwater aquatic life criteria for metals are expressed as a function of total hardness (mg/L) in the water body. The equations are provided in matrix at paragraph (b)(2) of this section. Values displayed above in the matrix correspond to a total hardness of 100 mg/l.
- f. Freshwater aquatic life criteria for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Values displayed above in the matrix correspond to a pH of 7.8.  $CMC = \exp(1.005(pH) - 4.869)$ .  $CCC = \exp(1.005(pH) - 5.134)$ .
- g. This criterion is based on 304(a) aquatic life criterion issued in 1980, and was issued in one of the following documents: Aldrin/Dieldrin (EPA 440/5-80-019), Chlordane (EPA 440/5-80-027), DDT (EPA 440/5-80-038), Endosulfan (EPA 440/5-80-046), Endrin (EPA 440/5-80-047), Heptachlor (440/5-80-052), Hexachlorocyclohexane (EPA 440/5-80-054), Silver (EPA 440/5-80-071). The Minimum Data Requirements and derivation procedures were different in the 1980 Guidelines than in the 1985 Guidelines. For example, a "CMC" derived using the 1980 Guidelines was derived to be used as an instantaneous maximum. If assessment is to be done using an averaging period, the values given should be divided by 2 to obtain a value that is more comparable to a CMC derived using the 1985 Guidelines.
- h. These totals simply sum the criteria in each column. For aquatic life, there are 23 priority toxic pollutants with some type of freshwater or saltwater, acute or chronic criteria. For human health, there are 92 priority toxic pollutants with either "water + organism" or "organism only" criteria. Note that these totals count chromium as one pollutant even though EPA has developed criteria based on two valence states. In the matrix, EPA has assigned numbers 5a and 5b to the criteria for chromium to reflect the fact that the list of 126 priority pollutants includes only a single listing for chromium.
- i. Criteria for these metals are expressed as a function of the water-effect ratio, WER, as defined in paragraph (c) of this section.  $CMC = \text{column B1 or C1 value} \times WER$ ;  $CCC = \text{column B2 or C2 value} \times WER$ .
- j. No criterion for protection of human health from consumption of aquatic organisms (excluding water) was presented in the 1980 criteria document or in the 1986 Quality Criteria for Water. Nevertheless, sufficient information was presented in the 1980 document to allow a calculation of a criterion, even though the results of such a calculation were not shown in the document.
- k. The CWA 304(a) criterion for asbestos is the MCL.

I. [Reserved]

- m. These freshwater and saltwater criteria for metals are expressed in terms of the dissolved fraction of the metal in the water column. Criterion values were calculated by using EPA's Clean Water Act 304(a) guidance values (described in the total recoverable fraction) and then applying the conversion factors in §131.36(b)(1) and (2).
- n. EPA is not promulgating human health criteria for these contaminants. However, permit authorities should address these contaminants in NPDES permit actions using the State's existing narrative criteria for toxics.
- o. These criteria were promulgated for specific waters in California in the National Toxics Rule ("NTR"), at §131.36. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries and waters of the State defined as inland, i.e., all surface waters of the State not ocean waters. These waters specifically include the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. This section does not apply instead of the NTR for this criterion.
- p. A criterion of 20 ug/l was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to the mouth of the Merced River. This section does not apply instead of the NTR for this criterion. The State of California adopted and EPA approved a site specific criterion for the San Joaquin River, mouth of Merced to Vernalis; therefore, this section does not apply to these waters.
- q. This criterion is expressed in the total recoverable form. This criterion was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to Vernalis. This criterion does not apply instead of the NTR for these waters. This criterion applies to additional waters of the United States in the State of California pursuant to 40 CFR 131.38(c). The State of California adopted and EPA approved a site-specific criterion for the Grassland Water District, San Luis National Wildlife Refuge, and the Los Banos State Wildlife Refuge; therefore, this criterion does not apply to these waters.
- r. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries including the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. This section does not apply instead of the NTR for these criteria.
- s. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the Sacramento-San Joaquin Delta and waters of the State defined as inland (i.e., all surface waters of the State not bays or estuaries or ocean) that include a MUN use designation. This section does not apply instead of the NTR for these criteria.
- t. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays and estuaries including San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of the State defined as inland (i.e., all surface waters of the State not bays or estuaries or ocean) without a MUN use designation. This section does not apply instead of the NTR for these criteria.
- u. PCBs are a class of chemicals which include aroclors 1242, 1254, 1221, 1232, 1248, 1260, and 1016, CAS numbers 53469219, 11097691, 11104282, 11141165, 12672296, 11096825, and 12674112, respectively. The aquatic life criteria apply to the sum of this set of seven aroclors.
- v. This criterion applies to total PCBs, e.g., the sum of all congener or isomer or homolog or aroclor analyses.

w. This criterion has been recalculated pursuant to the 1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA-820-B-96-001, September 1996. See also Great Lakes Water Quality Initiative Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA-80-B-95-004, March 1995.

x. The State of California has adopted and EPA has approved site specific criteria for the Sacramento River (and tributaries) above Hamilton City; therefore, these criteria do not apply to these waters.

**40 CFR 131.38 Editorial Note:** At 66 FR 9961, Feb. 13, 2001, §131.38 was amended in the table to paragraph (b)(1) under the column heading for "B Freshwater" by revising the column headings for "Criterion Maximum Concentration" and "Criterion Continuous Concentration"; under the column heading for "C Saltwater" by revising the column headings for "Criterion Maximum Concentration" and "Criterion Continuous Concentration"; and by revising entries "23." and "67.", effective Feb. 13, 2001. However, this is a photographed table and the amendments could not be incorporated into the text. For the convenience of the user, the amended text is set forth as follows:

1) § 131.38 Establishment of Numeric Criteria for priority toxic pollutants for the State of California.

(b)(1) \* \* \*

| A                               |               | B<br>Freshwater  |   | C<br>Saltwater   |  | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|---------------------------------|---------------|--|---|--|--|---|-----------------------------------|
| # Compound                      | CAS<br>number | Criterion<br>maximum<br>conc.<br>(µg/L) <sup>d</sup><br>B1 | Criterion<br>continuous<br>conc.<br>(µg/L) <sup>d</sup><br>B2 | Criterion<br>maximum<br>conc.<br>(µg/L) <sup>d</sup><br>C1 | Criterion<br>continuous<br>conc. (µg/L) <sup>d</sup><br>C2 | Water &<br>organisms<br>(µg/L)<br>D1  | Organisms<br>only<br>(µg/L)<br>D2 |
|                                 |               |  |   |  |  |   |                                   |
|                                 |               | *  | *   | *  | *  | *   | *                                 |
| 23. Chlorodibromomethane        | 124481        |  |   |  |  | <sup>a,c</sup> 0.41   | <sup>a,c</sup> 34                 |
|                                 |               | *  | *   | *  | *  | *   | *                                 |
| 67. Bis(2-Chloroisopropyl)Ether | 108601        |  |   |  |  | <sup>a</sup> 1,400  | <sup>a,1</sup> 170,000            |
|                                 |               | *  | *   | *  | *  | *   | *                                 |



Attachment C – (Not applicable)

Attachment D – Standard Provisions

## **I. Standard Provisions – Permit Compliance**

### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this WDR. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application. [40 CFR §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this WDR has not been modified to incorporate the requirement [40 CFR §122.41(a)(1)].

### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this WDR [40 CFR §122.41(c)].

### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this WDR that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR §122.41(d)].

### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this WDR. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this WDR [40 CFR §122.41(e)].

### **E. Property Rights**

1. This WDR does not convey any property rights of any sort or any exclusive privileges [40 CFR §122.41(g)].

2. The issuance of this WDR does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [40 CFR §122.5(c)].

#### **F. Inspection and Entry**

The Discharger shall allow the Regional Water Quality Control Board (Regional Board), California State Water Resources Control Board (State Board), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383(c)]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this WDR [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this WDR [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this WDR [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring WDR compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

#### **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [40 CFR §122.41(m)(2)].

3. Prohibition of bypass – Bypass is prohibited, and the Regional Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
  - c. The Discharger submitted notice to the Regional Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below [40 CFR §122.41(m)(3)(ii)].

#### H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR §122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph H.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for

- noncompliance, is final administrative action subject to judicial review [40 CFR §122.41(n)(2)].
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR §122.41(n)(3)]:
    - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
    - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
    - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [40 CFR §122.41(n)(3)(iii)]; and
    - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §122.41(n)(3)(iv)].
  3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR §122.41(n)(4)].

## **II. Standard Provisions – Permit Action**

### **A. General**

This WDR may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any WDR condition [40 CFR §122.41(f)].

If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this WDR, this WDR shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Discharger so notified.

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this WDR after the expiration date of this WDR, the Discharger must apply for and obtain a new permit [40 CFR §122.41(b)].

### **C. Transfers**

This Order is not transferable to any person because the Regional Board is required to modify or revoke and reissue this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [40 CFR §122.41(l)(3)] [40 CFR §122.61]. Since this is a WDR a new owner or operator shall instead submit an NOI application to enroll in this WDR and the previous owner or operator shall submit a NOT.

### **D. Severability**

The provisions of this WDR are severable and if any provisions of this WDR or the application of any provisions of this WDR to any circumstance is held invalid, the applications of such provision to other circumstances and the remainder of this WDR shall not be affected thereby.

### **E. Pollution, Contamination, or Nuisance [CWC §13050]**

Neither the treatment nor the discharge shall create a condition of pollution, contamination or nuisance.

## **III. Standard Provisions – Monitoring**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR §122.41(j)(1)].
- B.** Monitoring results must be conducted according to test procedures under 40 CFR section 136 or, in the case of sludge use or disposal, approved under 40 CFR section 136 unless otherwise specified in 40 CFR section 503 unless other test procedures have been specified in this WDR [40 CFR §122.41(j)(4)] [40 CFR §122.44(i)(1)(iv)].

## **IV. Standard Provisions – Records**

- A.** Except for records of monitoring information required by this WDR related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR section 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this WDR, and records of all data used to complete the application for this WDR, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Board Executive Officer at any time [40 CFR §122.41(j)(2)].
- B.** Records of monitoring information shall include:
  - 1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];

2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
  3. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
  4. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
  5. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
  6. The results of such analyses [40 CFR §122.41(j)(3)(vi)].
- C.** Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:
1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and
  2. Permit applications and attachments, permits and effluent data [40 CFR §122.7(b)(2)].

## **V. Standard Provisions – Reporting**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Board, State Board, or USEPA within a reasonable time, any information which the Regional Board, State Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this WDR or to determine compliance with this WDR. Upon request, the Discharger shall also furnish to the Regional Board, State Board, or USEPA copies of records required to be kept by this WDR [40 CFR §122.41(h)] [CWC 13267].

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Board, State Board, and/or USEPA shall be signed and certified in accordance with paragraph (B.2) and (B.3) of this provision [40 CFR §122.41(k)].
2. All permit applications shall be signed as follows:

- a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [40 CFR §122.22(a)(1)];
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 CFR §122.22(a)(2)]; or
  - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR §122.22(a)(3)].
3. All reports required by this WDR and other information requested by the Regional Board, State Board, or USEPA shall be signed by a person described in paragraph (B.2) of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in paragraph (B.2) of this provision [40 CFR §122.22(b)(1)];
  - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [40 CFR §122.22(b)(2)]; and

- c. The written authorization is submitted to the Regional Board, State Board, or USEPA [40 CFR §122.22(b)(3)].
4. If an authorization under paragraph (B.3) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (B.3) of this provision must be submitted to the Regional Board, State Board or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].
5. Any person signing a document under paragraph (B.2) or (B.3) of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations" [40 CFR §122.22(d)].

### C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the MRP in this WDR [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Self-Monitoring Report (SMR) form or forms provided or specified by the Regional Board or State Board for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this WDR using test procedures approved under 40 CFR section 136 or, in the case of sludge use or disposal, approved under 40 CFR section 136 unless otherwise specified in 40 CFR section 503, or as specified in this WDR, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the SMR or sludge reporting form specified by the Regional Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this WDR [40 CFR §122.41(l)(4)(iii)].



#### D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this WDR, shall be submitted no later than 14 days following each schedule date [40 CFR §122.41(l)(5)].

#### E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this WDR [40 CFR §122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this WDR [40 CFR §122.41(l)(6)(ii)(B)].
  - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this WDR to be reported within 24 hours [40 CFR §122.41(l)(6)(ii)(C)].
3. The Regional Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR §122.41(l)(6)(iii)].

#### F. Planned Changes

The Discharger shall give notice to the Regional Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR §122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [40 CFR §122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which

are subject neither to effluent limitations in this WDR nor to notification requirements under 40 CFR section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §122.41(l)(1)(ii)]; or

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 CFR §122.41(l)(1)(iii)].

#### **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Board or State Board of any planned changes in the permitted facility or activity that may result in noncompliance with the requirements of this WDR [40 CFR §122.41(l)(2)].

#### **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 CFR §122.41(l)(7)].

#### **I. Discharge Monitoring Quality Assurance (DMQA) Program [STATE WATER BOARD/USEPA 106 MOA]**

The Discharger shall conduct appropriate analyses on any sample provided by USEPA as part of the DMQA program. The results of such analyses shall be submitted to USEPA's DMQA manager.

#### **J. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Board, State Board, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR §122.41(l)(8)].

### **VI. Standard Provisions – Enforcement**

- A. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved

under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR §122.41(a)(2)] [CWC 13385 and 13387].

- B.** Any person may be assessed an administrative penalty by the Regional Board for violating CWA section 301, 302, 306, 307, 308, 318 or 405, or any permit condition or limitation implementing any of such sections in a permit issued under CWA section 402. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day, during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR §122.41(a)(3)].
- C.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both [40 CFR §122.41(j)(5)].
- D.** The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this WDR, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by

a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR §122.41(k)(2)].

## **VII. Additional Provisions – Notification Levels**

### **A. Non-Municipal Facilities**

Dischargers of existing manufacturing, commercial, mining, and silvicultural wastes shall notify the Regional Board as soon as they know or have reason to believe [40 CFR §122.42(a)]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this WDR, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(1)]:
  - a. 100 micrograms per liter (µg/L) [40 CFR §122.42(a)(1)(i)];
  - b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(1)(ii)];
  - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(1)(iii)]; or
  - d. The level established by the Regional Board in accordance with 40 CFR section 122.44(f) [40 CFR §122.42(a)(1)(iv)].
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this WDR, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(2)]:
  - a. 500 micrograms per liter (µg/L) [40 CFR §122.42(a)(2)(i)];
  - b. 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(2)(ii)];
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(2)(iii)]; or
  - d. The level established by the Regional Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(2)(iv)].

### **B. Publicly-Owned Treatment Works (POTWs) (Not Applicable)**

## Attachment E – Monitoring and Reporting Program (MRP)

Title 40 of the Code of Federal Regulations (CFR) section 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the California Regional Water Quality Control Board (Regional Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### I. General Monitoring Provisions

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring location identified in the representative sampling and analysis program. Another waste stream, body of water, or substance shall not dilute the monitored discharge. Monitoring points shall not be changed without notification to and the approval of the appropriate Regional Board.
- B. Monitoring must be conducted according to USEPA test procedures approved under 40 CFR section 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act as amended, unless other test procedures are specified in this WDR and/or by the appropriate Regional Board.
- C. If the Discharger monitors any pollutant more frequently than required by this WDR using test procedures approved under 40 CFR section 136, or as specified in this WDR or by the appropriate Regional Board, the results of the monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's Annual Report. The increased frequency of monitoring shall also be reported.
- D. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this WDR.
- E. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Regional Board.
- F. All monitoring instruments and devices used by the Discharger to fulfill the monitoring program shall be properly maintained and calibrated to ensure accuracy. All flow measurement devices shall be calibrated at least once per year to ensure accuracy of the devices.
- G. Order No. R9-2007-0034 may be modified by the Regional Board and EPA to enable the discharger to participate in comprehensive regional monitoring activities conducted in the Southern California Bight during the term of this permit. The intent of regional monitoring activities is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled scientific resources of the region. During these coordinated sampling efforts, the discharger's sampling and analytical effort may be

reallocated to provide a regional assessment of the impact of the discharge of municipal wastewater to the Southern California Bight. Anticipated modifications to the monitoring program will be coordinated so as to provide a more comprehensive picture of the ecological and statistical significance of monitoring results and to determine cumulative impacts of various pollution sources. If predictable relationships among the biological, water quality and effluent monitoring variables can be demonstrated, it may be appropriate to decrease the discharger's sampling effort. Conversely, the monitoring program may be intensified if it appears that the objectives cannot be achieved through the discharger's existing monitoring program. These changes will improve the overall effectiveness of monitoring in the Southern California Bight. Minor changes may be made without further public notice.

## **II. Monitoring Locations**

- A.** Dischargers enrolling for the first time under this WDR shall develop a representative sampling and analysis program to be used as case studies to represent the typical types of discharges occurring within their service areas. This study, to be submitted as the first annual report, will include the monitoring locations and rationale for choosing those locations.
- B.** Re-enrollees must submit a new case study defining monitoring locations and rationale for these locations, if there are new types of discharges.

## **III. Influent Monitoring Requirements (Not Applicable)**

## **IV. Effluent Monitoring Requirements**

- A.** Dischargers who are enrolling for the first time under this WDR shall develop a representative sampling and analysis program based on the discharge anticipated from the extracted groundwater activity as compared to the Effluent Limitations and Discharge Specifications established in this Permit to ensure the discharge will not violate Regional Board Discharge Prohibitions.
- B.** The Regional Board may increase monitoring requirements on a case-by-case basis. Additional monitoring for individual discharges may be required, where necessary, to show that during the term of the discharge, applicable water quality objectives will be maintained.
- C. Treatment System Status**  
The daily status (e.g., onsite, in operation/on standby, etc.) of any treatment systems used to achieve compliance with this WDR or the Notice of Enrollment from the Regional Board shall be reported monthly.
- D. Initial and Annual Monitoring Program**

The discharger shall, initially and on an annual basis, sample the constituents from the Annual Monitoring Program A below for discharge flows under 50,000

gallons per day (gpd) or from the Annual Monitoring Program B below for discharge flows of 50,000 gpd or more.

Annual Monitoring Program A consists of the 38 constituents from Section V. Effluent Limitations and Discharge Specifications of this WDR.

Annual Monitoring Program B consists of the following constituents: The 38 constituents from Section V. Effluent Limitations and Discharge Specifications and the 126 constituents from Attachment B2 – Priority Toxic Pollutants of this WDR.

## E. Discharge Monitoring

The minimum frequency of analysis for constituents listed below identified with an asterisk (\*), that are reported as non-detect (ND) for two consecutive monitoring periods may be decreased from; every other week to monthly; every other month to quarterly; and quarterly to semiannually, after notification from the Regional Board. The reporting frequency does not change.

Discharge monitoring shall be conducted as follows:

| Constituent                      | Analyzed Sample |      | Reporting and Calculated Values |              |      |              |                | Frequency of Monitoring | Frequency of Reporting |
|----------------------------------|-----------------|------|---------------------------------|--------------|------|--------------|----------------|-------------------------|------------------------|
|                                  | Lab Results     |      | Inst. Max                       | MDEL         | AWEL | AMEL         | 6-Month Median |                         |                        |
|                                  | Units           | Type | Units                           |              |      |              |                |                         |                        |
| General / Inorganic / Biological |                 |      |                                 |              |      |              |                |                         |                        |
| Flow                             | MGD             | N/A  | MGD                             |              |      |              |                | Daily                   | Monthly                |
| Settleable Solids                | ml/L            | Grab | ml/L                            |              | ml/L | ml/L         |                | Every other week        | Monthly                |
| Total Suspended Solids           | mg/L            | Grab | mg/L<br>lb/d                    |              |      | mg/L<br>lb/d | yes            | Every other week        | Monthly                |
| Hydrogen Sulfide                 | µg/L            | Grab | µg/L<br>lb/d                    | µg/L<br>lb/d |      | µg/L<br>lb/d | yes            | Every other week        | Monthly                |
| Total Residual Chlorine          | µg/L            | Grab | µg/L<br>lb/d                    | µg/L<br>lb/d |      | µg/L<br>lb/d | yes            | Daily when chlorinating | Monthly                |
| Cyanide*                         | µg/L            | Grab |                                 | µg/L<br>lb/d |      | µg/L<br>lb/d | yes            | Every other month       | Quarterly              |
| Acute Toxicity                   | TUa             | Grab |                                 | TUa          |      |              |                | Quarterly               | Quarterly              |
| Chronic Toxicity                 | TUc             | Grab |                                 | TUc          |      |              |                | Quarterly               | Quarterly              |
| Total Coliform†                  | MPN/<br>100 ml  | Grab | MPN/<br>100 ml                  |              |      |              |                | Weekly                  | Monthly                |
| Fecal Coliform†                  | MPN/<br>100 ml  | Grab | MPN/<br>100 ml                  |              |      |              |                | Weekly                  | Monthly                |
| pH                               | Units           | Grab | Units                           |              |      |              |                | Every other week        | Monthly                |



| Constituent                   | Analyzed Sample |           | Reporting and Calculated Values |      |              |                |                         | Frequency of Monitoring | Frequency of Reporting |
|-------------------------------|-----------------|-----------|---------------------------------|------|--------------|----------------|-------------------------|-------------------------|------------------------|
|                               | Lab Results     | Inst. Max | MDEL                            | AWEL | AMEL         | 6-Month Median | Calculate Mass Loading? |                         |                        |
|                               | Units           | Type      | Units                           |      |              |                |                         |                         |                        |
| Dissolved Oxygen (DO)†        | mg/L            | Grab      | mg/L                            |      |              |                |                         | Weekly                  | Monthly                |
| Petroleum -Related            |                 |           |                                 |      |              |                |                         |                         |                        |
| MTBE*                         | µg/L            | Grab      | µg/L<br>lb/d                    |      |              |                | yes                     | Quarterly               | Quarterly              |
| Benzene*                      | µg/L            | Grab      | µg/L<br>lb/d                    |      |              |                | yes                     | Quarterly               | Quarterly              |
| Ethylbenzene*                 | µg/L            | Grab      | µg/L<br>lb/d                    |      |              |                | yes                     | Quarterly               | Quarterly              |
| Toluene*                      | µg/L            | Grab      | µg/L<br>lb/d                    |      |              |                | yes                     | Quarterly               | Quarterly              |
| Xylene*                       | µg/L            | Grab      | µg/L<br>lb/d                    |      |              |                | yes                     | Quarterly               | Quarterly              |
| Total Petroleum Hydrocarbons* | mg/L            | Grab      | mg/L<br>lb/d                    |      |              |                | yes                     | Quarterly               | Quarterly              |
| Metals                        |                 |           |                                 |      |              |                |                         |                         |                        |
| Arsenic*                      | µg/L            | Grab      | µg/L<br>lb/d                    |      | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |
| Cadmium*                      | µg/L            | Grab      | µg/L<br>lb/d                    |      | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |
| Chromium (hexavalent)*        | µg/L            | Grab      | µg/L<br>lb/d                    |      | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |
| Copper*                       | µg/L            | Grab      | µg/L<br>lb/d                    |      | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |
| Lead*                         | µg/L            | Grab      | µg/L<br>lb/d                    |      | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |
| Mercury*                      | µg/L            | Grab      | µg/L<br>lb/d                    |      | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |
| Nickel*                       | µg/L            | Grab      | µg/L<br>lb/d                    |      | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |
| Silver*                       | µg/L            | Grab      | µg/L<br>lb/d                    |      | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |

| Constituent                           | Analyzed Sample | Reporting and Calculated Values |              |              |              |                |                         | Frequency of Monitoring | Frequency of Reporting |
|---------------------------------------|-----------------|---------------------------------|--------------|--------------|--------------|----------------|-------------------------|-------------------------|------------------------|
|                                       | Lab Results     | Inst. Max                       | MDEL         | AWEL         | AMEL         | 6-Month Median | Calculate Mass Loading? |                         |                        |
|                                       | Units           | Type                            | Units        |              |              |                |                         |                         |                        |
| Tributyltin (TBT)*                    | µg/L            | Grab                            |              |              | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |
| Zinc*                                 | µg/L            | Grab                            |              | µg/L<br>lb/d | µg/L<br>lb/d |                | yes                     | Every other month       | Quarterly              |
| <b>Organics</b>                       |                 |                                 |              |              |              |                |                         |                         |                        |
| Phenolic Compounds (non-chlorinated)* | µg/L            | Grab                            | µg/L<br>lb/d | µg/L<br>lb/d |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| Chlorinated Phenolics                 | µg/L            | Grab                            | µg/L<br>lb/d | µg/L<br>lb/d |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| 1,1,2,2-tetrachlorethane (PCA)        | µg/L            | Grab                            |              |              |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| 1,1,1-trichloroethane (TCA)           | µg/L            | Grab                            |              |              |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| 1,1,2-trichloroethane (TCA)           | µg/L            | Grab                            |              |              |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| 1,2-dichloroethane                    | µg/L            | Grab                            |              |              |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| Tetrachloroethylene (PCE)             | µg/L            | Grab                            |              |              |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| Trichloroethylene (TCE)               | µg/L            | Grab                            |              |              |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| Vinyl chloride                        | µg/L            | Grab                            |              |              |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| Carbon tetrachloride                  | µg/L            | Grab                            |              |              |              | µg/L<br>lb/d   | yes                     | Quarterly               | Quarterly              |
| Base/Neutral Organic Compounds        | µg/L            | Grab                            | µg/L<br>lb/d |              |              |                | yes                     | Quarterly               | Quarterly              |

† for Groundwater Extraction Operations associated with Sewer System Replacement Construction Projects.

Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports.

The results of such analysis shall be reported in the annual report. Grab samples shall be collected at the applicable point of discharge (either at the storm drain or the receiving water). If a Discharger monitors the above constituents more frequently than required by this WDR, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the annual report. Separate annual reports are required for each region.

- F.** The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this WDR, and records of all data used to complete the application for this WDR, for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of this Regional Board. These records shall include:

1. The date, place, and time of site inspections, sampling, visual observation, and/or measurement;
2. The individual(s) who performed the site inspections, sampling, visual observations, and/or measurements;
3. The dimension, size and/or volume of vault;
4. Flow measurements (if required) and duration of discharge;
5. The estimated volume of discharge;
6. The date and time of analyses;
7. The laboratory, staff, or wholesaler who performed the analyses; and
8. Analytical results.

**G.** Toxicity Reduction Evaluation (TRE)

The enrollee shall develop a Toxicity Reduction Evaluation (TRE) workplan. The workplan shall be subject to the approval of the Regional Board and shall be modified as directed by the Regional Board. Enrollees shall submit the TRE workplan to the Regional Board upon request of the Regional Board. The TRE workplan shall be developed no later than six months after adoption of this WDR in accordance with the following manuals:

1. Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070).
2. Toxicity Identification Evaluation (TIE), Phase I (EPA/600/6-91/005F).

3. Methods for Aquatic Toxicity Identification Evaluations, Phase II (EPA/600/R-92/080).
  4. Methods for Aquatic Toxicity Identification Evaluations, Phase III (EPA/600/R-92/081).
- H. If toxicity-testing results show a violation of any acute toxicity limitation identified in Discharge Specifications of this WDR, the enrollee shall:
1. Take all reasonable measures necessary to immediately minimize toxicity; and
  2. Increase the frequency of the toxicity test(s), which showed a violation, to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.
- I. If the Regional Board determines that toxicity testing shows consistent violation of any acute toxicity limitation identified in Discharge Specifications of this WDR, the enrollee shall conduct a TRE that includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the enrollee shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations identified in Discharge Specifications of this WDR.
- J. Within 14 days of completion of the TRE, the enrollee shall submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with all the toxicity limitations of this WDR and to prevent recurrence of violations of those limitations, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the Regional Board.
- V. Whole Effluent Toxicity Testing Requirements (Not Applicable)**
- VI. Land Discharge Monitoring Requirements (Not Applicable)**
- VII. Reclamation Monitoring Requirements (Not Applicable)**
- VIII. Receiving Water Monitoring Requirements – SURFACE WATER AND GROUNDWATER (Not Applicable)**
- IX. Other Monitoring Requirements (Not Applicable)**
- X. Reporting Requirements**
- A. General Monitoring and Reporting Requirements

All reports submitted in response to this WDR shall comply with signatory requirements set forth in the Standard Provisions.

**B. Self Monitoring Reports (SMRs) to State and Regional Board**

1. At any time during the term of this permit, the State or Regional Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall submit annual monitoring results to the Regional Board by the 20th day of March for the preceding calendar year. The Discharger shall report in the SMR the results for all monitoring specified in this MRP. The Discharger shall submit annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this WDR. If the Discharger monitors any pollutant more frequently than required by this WDR, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. The Discharger shall submit SMRs in accordance with the following requirements:
  - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that are entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
  - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of this WDR; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
  - c. SMRs must be submitted to the appropriate Regional Board, signed and certified as required by the Standard Provisions (Attachment D).

**C. Self-Monitoring Reports (SMRs) to EPA**

When requested by USEPA, the Discharger shall also complete and submit Self-Monitoring Reports to USEPA. The submittal date shall be specified in the request.

**D. OTHER REPORTS (NOT APPLICABLE)**

## Attachment F – Fact Sheet

As described in section III of this WDR, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this WDR.

### I. Permit Information

#### A. INTRODUCTION

This Order establishes a WDR regulating the discharge of groundwater extraction waste discharges to San Diego Bay, tributaries thereto under tidal influence, and storm drains or other conveyance systems tributary thereto from all temporary construction groundwater extraction, and similar waste discharges.

#### B. BACKGROUND

In 1972, the Federal Water Pollution Control Act, currently referred to as the Federal Clean Water Act (CWA), was amended to provide that the discharge of pollutants to waters of the United States from any point source is prohibited, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The federal regulations allow authorized states to issue either general permits or individual permits to regulate discharges of pollutants to waters of the United States. On April 23, 1990, the California Regional Water Quality Control Board, San Diego Region (Regional Board) issued a general permit for groundwater extraction waste discharges to San Diego Bay and tributaries thereto (Order No. 90-31). The permit was reissued two more times on May 16, 1995 (Order No. 95-25) and June 14, 2000 (Order No. 2000-90).

Order No. 2000-90 regulated temporary groundwater extraction discharges to San Diego Bay and prohibited permanent groundwater extraction discharges. However, Order No. 2000-90 exempted three pre-existing permanent groundwater extraction discharges that were enrolled in the Order No. 95-25 when Order No. 2000-90 was adopted. They were, the City of San Diego, San Diego Convention Center permanent dewater system, the Embassy Suites Hotel permanent dewatering system, and the One America Plaza permanent dewatering system. On March 12, 2003, the City of San Diego was issued an individual NPDES permit for the discharge of extracted groundwater waste from the San Diego Convention Center. As of the date of adoption of this WDR, the following two existing permanent groundwater extraction discharges enrolled in Order No. 2000-90 will continue to be regulated in this WDR.

- a. Embassy Suites Hotel permanent dewatering system
- b. One America Plaza permanent dewatering system

In accordance with Title 40, Code of Federal Regulations (CFR), the Regional Board must meet general program requirements prior to the re-issuance and adoption of a general NPDES permit. General program requirements include

preparing a draft WDR, public noticing, allowing a public comment period, and conducting a public hearing. To meet these requirements, the Regional Board prepared a draft WDR. The first draft WDR was made available to interested parties on April 27, 2007 for comments and an updated draft was available on August 28, 2007. A public hearing to receive testimony from interested parties was scheduled for October 10, 2007. The Notice of Public Hearing was sent to the interested party list. A public hearing notice was also posted in major newspapers in the San Diego Region.

### C. GENERAL CRITERIA

This WDR is intended to cover temporary discharges of pollutants to San Diego Bay and its tributaries under tidal influence from groundwater extraction due to construction and other groundwater extraction activities. To be subject to waste discharge requirements by this WDR, Dischargers must meet the following criteria:

1. The discharge of any flow of extracted groundwater into San Diego Bay.
2. The discharge of groundwater extraction wastes will not be permanent. Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges.
3. Pollutant concentrations in the discharge will comply with the Discharge Specifications of this WDR.

This WDR does not cover:

PERMANENT DISCHARGES – Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges except for the following two existing permanent groundwater extraction discharges currently enrolled in Order 2000-90 until such time the discharges receive an individual permit:

- c. Embassy Suites Hotel permanent dewatering system
- d. One America Plaza permanent dewatering system

STORM WATER - Storm water runoff due to construction activities. These activities may be covered under the statewide general NPDES permit for storm water discharges associated with construction activities (CAS000002), the statewide general NPDES permit for Storm Water Runoff Associated With Small Linear Underground/Overhead Construction Projects (CAS000005), and/or Clean Water Act (CWA) Section 401 Water Quality Certifications.

**SANITARY SEWER** - Discharges to a sanitary sewer. These discharges do not need coverage under the NPDES Program, although the agency controlling the sanitary sewer must approve discharges to its conveyance system.

**UTILITY VAULTS** - Discharges from utility vaults and underground structures. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water (CAG990002).

**HYDROSTATIC/ POTABLE WATER** – Discharges from drinking water well development. These discharges are covered in Order No. R9-2002-0020.

#### Notification Requirements

The purpose of this WDR is to facilitate regulation of discharges from groundwater extraction activities. To obtain coverage under this WDR, the Discharger must submit a Notice of Intent (NOI), a project map(s), an initial Monitoring Report, and first annual fee. Signing the certification on the NOI signifies that the Discharger intends to comply with the provisions and requirements of this WDR. An NOI must be signed to be valid.

#### **D. DISCHARGE TO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)**

Local agencies responsible for operating the MS4s may not passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the MS4 operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or control. These discharges may cause or contribute to a condition of contamination or a violation of water quality standards.

Prior to discharging into an MS4, the Discharger shall demonstrate alternatives to discharging extracted groundwater waste into an MS4 and why it is technically or economically infeasible to implement these alternatives.

Without prior approval from the appropriate local agency with jurisdiction over the MS4, the discharger shall not discharge extracted groundwater waste under this WDR into an MS4.

Therefore, at least 30 days prior to initiating an extracted groundwater discharge to an MS4, the Discharger shall notify and receive authorization from the appropriate local agency with jurisdiction over the MS4. This requirement encourages communication between Dischargers enrolled under this WDR and local agencies responsible for MS4s in an effort to reduce misunderstandings and concerns over the types of discharges covered by this WDR.

#### **E. DISCHARGE DESCRIPTION**

Existing and proposed discharges of groundwater extraction waste to San Diego Bay from construction dewatering, foundation dewatering, and groundwater



cleanup projects: 1) result from similar operations (all involve extraction and discharge of groundwater), 2) are the same type of waste (all are groundwater), 3) require similar effluent limitations for the protection of the beneficial uses of San Diego Bay, 4) require the issuance of a permit in a short time period because the nature of the project is short term, 5) require similar monitoring, and 6) are more appropriately regulated under a general permit rather than an individual permit.

Much of the groundwater in the downtown San Diego area contains petroleum products and solvents, mainly resulting from underground storage tank leaks and pipeline leaks.

**F. DESCRIPTION OF WASTEWATER AND BIOSOLIDS TREATMENT OR CONTROLS (NOT APPLICABLE)**

**G. DISCHARGE POINTS AND RECEIVING WATERS**

San Diego Bay has a surface area of approximately 18.5 square miles and is surrounded by metropolitan San Diego. Most of the shore line has been heavily developed for recreational, residential, military, and industrial use.

Under the WDR, there may be multiple discharge points. Additional information regarding the receiving waters can be found in the completed NOI which describes the discharge and identifies the points of discharge.

Storm drains are not designed to maximize initial dilution; therefore, this WDR uses zero initial dilution factor. In addition, the Regional Board has the practice not to consider dilution when setting water quality-based effluent limitations for discharges to bays and estuaries unless the dilution ratio is verified with field data. Since this is a WDR without existing data points, no dilution credit is considered for the discharge.

**H. SUMMARY OF EXISTING REQUIREMENTS AND SELF-MONITORING REPORT DATA**

Order No. 2000-90, which this WDR replaces, requires the Discharger not to exceed the Effluent Limitations for a number of constituents, and to monitor and report these constituents. Significant changes occurred in the Effluent Limitation requirements for some constituents. Effluent Limitations under Order No. 2000-90 were developed using the CTR, while the SIP was used for this WDR.

**I. Compliance Summary (Not Applicable)**

**J. Planned Changes (Not Applicable)**

**II. Applicable Plans, Policies, and Regulations**

The requirements contained in this WDR are based on the requirements and authorities described in this section.

## **A. Legal Authorities**

This WDR is issued pursuant to CWA section 402 and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as an NPDES permit for point source discharges from groundwater extraction waste discharges to surface waters. This WDR also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

States may request authority to issue general NPDES permits pursuant to 40 CFR section 122.28. On June 8, 1989, the State Board submitted an application to the USEPA requesting revisions to its NPDES Program in accordance with 40 CFR 122.28, 123.62, and 403.10. The application included a request to add WDR authority to its approved NPDES Program. On September 22, 1989, the USEPA, Region 9, approved the State Board's request and granted authorization for the State to issue general NPDES permits.

## **B. California Environmental Quality Act (CEQA)**

This action to adopt a NPDES permit is exempt from the provisions of CEQA (Public Resources Code section 21100, et seq.) in accordance with CWC section 13389 for the following reasons: 1) A Discharger cannot obtain coverage under this WDR if pollutants in the discharge, cause, contribute, or have the reasonable potential to cause or contribute to a water quality standards violation; 2) The permit requires Dischargers to monitor and report the discharge to ensure the Dischargers will not cause a violation; and 3) The Regional Board's granting of the exceptions does not have the potential for causing significant adverse environmental effects. See California Code of Regulations, Title 14, section 15061(b)(3).

## **C. State and Federal Regulations, Policies, and Plans**

### **1. Water Quality Control Plan**

On September 8, 1994, the Regional Board adopted a Water Quality Control Plan for the San Diego Region (hereinafter Basin Plan), that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Board Resolution No. 88-63 requires that, with certain exceptions, the Regional Board assigns the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plans.

Beneficial uses applicable to San Diego Bay waters are as follows:

- a. Industrial service supply;
- b. Navigation;
- c. Contact water recreation;
- d. Non-contact water recreation;
- e. Ocean commercial and sport fishing;

- f. Preservation of rare, threatened or endangered species;
  - g. Marine habitat;
  - h. Fish migration;
  - i. Shellfish harvesting;
  - j. Fish spawning;
  - k. Wildlife habitat;
  - l. Preservation of areas of special biological significance; and
  - m. Mariculture.
2. **National Toxics Rule (NTR) and California Toxics Rule (CTR)**  
USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995, and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
3. **State Implementation Policy (SIP)**  
On March 2, 2000, the State Board adopted the SIP, which became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP includes procedures for determining the need for and calculating Water Quality-Based Effluent Limitations (WQBELs), and requires Dischargers to submit data sufficient to do so. The State Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this WDR implement the SIP.
4. **Antidegradation Policy**  
Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Board established California's antidegradation policy in State Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation policy where applicable. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. As discussed in detail in this Fact Sheet, the permitted discharge shall be consistent with the antidegradation provision of 40 CFR section 131.12 and State Board Resolution No. 68-16.
5. **Anti-Backsliding Requirements**  
Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding

provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in the WDR are at least as stringent as the effluent limitations in the previous Order.

**6. Monitoring and Reporting Requirements**

Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Boards to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to implement Federal and State requirements. This MRP is provided in Attachment E.

**D. Impaired Water Bodies on CWA 303(d) List**

The federal Clean Water Act requires States to identify and make a list of surface water bodies that are polluted. These water bodies, referred to in law as "water quality limited segments," do not meet water quality standards even after discharges of wastes from point sources have been treated by the minimum required levels of pollution control technology. Wastewater treatment plants, a city's storm drain system, or a boat yard, are a few examples of point sources that discharge wastes to surface waters. States are required to compile the water bodies into a list, referred to as the "Clean Water Act Section 303(d) List of Water Quality Limited Segments" (303(d) List). States must also prioritize the water bodies on the list and develop action plans, called total maximum daily loads (TMDLs) to improve the water quality.

The State Board updated the 2004-2006 303(d) List for California on October 25, 2006, and EPA approved it on November 30, 2006.

There are approximately 100 impaired water bodies on the 303(d) List in the San Diego Region. Most TMDLs for water bodies within the San Diego Region are under development or have not been started. However, four TMDLs for the San Diego Region need only State Board approval to be complete, and three are already complete. Of the three completed TMDLs, two impact the water quality of San Diego Bay. One TMDL is for Diazonon in Chollas Creek, while the other is for copper in the watershed that drains Shelter Island Basin. These TMDLs did not allocate any waste load for groundwater extraction waste discharge; therefore, the discharge of copper into San Diego Bay via Shelter Island Basin watershed, and the discharge of Diazinon into San Diego Bay via Chollas Creek are prohibited.

**E. Other Plans, Policies and Regulations**

**Ocean Plan**

The State Board adopted the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) in 2005, it was approved by USEPA, and became effective on February 14, 2006. The Ocean Plan identifies the following beneficial uses of state ocean waters to be protected:

- a. Industrial water supply;
- b. Navigation;
- c. Aesthetic enjoyment;
- d. Water contact recreation;
- e. Non-contact water recreation;
- f. Ocean commercial and sport fishing;
- g. Mariculture;
- h. Preservation and enhancement of Areas of Special Biological Significance;
- i. Preservation and enhancement of rare and endangered species;
- j. Marine habitat;
- k. Fish migration;
- l. Fish spawning; and
- m. Shellfish harvesting.

In order to protect the above beneficial uses, the Ocean Plan establishes water quality objectives (for bacteriological, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the ocean, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions.

Limits derived from the Ocean Plan have been included in this WDR to protect beneficial uses of San Diego Bay because beneficial uses of San Diego Bay are similar to those of the ocean waters of the State.

### **Toxic Hot Spots**

On June 17, 1999, the State Board adopted the Consolidated Toxic Hot Spot Cleanup Plan (Consolidated Plan) required under Bay Protection and Toxic Cleanup Program (CWC Section 13395). The Consolidated Plan listed known toxic hot spots, including several located in San Diego Bay. The Consolidated Plan also requires Regional Boards to reevaluate waste discharge requirements for those discharges associated with each known toxic hot spot that can reasonably be expected to cause or contribute to the creation and maintenance of the known toxic hot spot. The Regional Board finds that discharges from groundwater extraction waste discharges activities may contribute to the pollution present at the toxic hot spots listed in the Consolidated Plan. In the event that future groundwater extraction waste discharges are proposed to an area of San Diego Bay that is designated as a toxic hot spot, the Regional Board will at that time, review both the Discharge Specifications and the Monitoring and Reporting Programs for appropriate modification(s).

### **III. Rationale For Effluent Limitations and Discharge Specifications**

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. Effluent limitations are based on the following principles:

- A. 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards;
- B. 40 CFR section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality criteria have not been established, three options exist to protect water quality: 1) 40 CFR section 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); 2) proposed state criteria or a state policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established;
- C. Any discharge of untreated groundwater to San Diego Bay threatens to cause or contribute to excursions above narrative water quality objectives contained in the Basin Plan as a result of the potential discharge of petroleum related compounds, solvents, and metals. On May 26, 1989, USEPA enacted revisions to NPDES program regulations (40 CFR 122). When a proposed discharge of a compound or chemical threatens to cause or contribute to an excursion above a State narrative water quality standard and a numeric water quality standard for the specific chemical has not been established, the NPDES program regulations require the Regional Board to do the following: 1) Establish effluent limitations using a proposed State water quality objective or standard, or an explicit State policy or regulation interpreting its narrative water quality objective which will protect and maintain water quality and designated beneficial uses of the receiving water; 2) Establish effluent limitations on a case-by-case basis, using USEPA's water quality criteria published under CWA section 307(a); or 3) Establish effluent limitations on an indicator parameter for the pollutants of concern; and
- D. 40 CFR section 122.44(l) requires that when a permit is renewed or reissued, effluent limitations must be at least as stringent as the effluent limitations in the previous permit. Since this permit is a renewal of a previous permit, anti-backsliding is applicable and the following pollutants are included:

|                              |                                      |
|------------------------------|--------------------------------------|
| Settleable Solids            | Copper                               |
| Total Suspended Solids       | Lead                                 |
| Hydrogen Sulfide             | Mercury                              |
| Total Residual Chlorine      | Nickel                               |
| pH                           | Silver                               |
| Benzene                      | Zinc                                 |
| Ethylbenzene                 | Cyanide                              |
| Toluene                      | Phenolic Compounds (non-chlorinated) |
| Xylene                       | Chlorinated Phenolics                |
| Total Petroleum Hydrocarbons | 1,1,2,2-tetrachlorethane (PCA)       |
| Arsenic                      | 1,1,1-trichloroethane (TCA)          |
| Cadmium                      | 1,1,2-trichloroethane (TCA)          |
| Chromium (hexavalent)        |                                      |

|                                   |                       |
|-----------------------------------|-----------------------|
| 1,2-dichloroethane                | Acute Toxicity        |
| Tetrachloroethylene (PCE)         | Chronic Toxicity      |
| Trichloroethylene (TCE)           | Tributyltin (TBT)     |
| Vinyl chloride                    | Total Coliform        |
| Carbon tetrachloride              | Fecal Coliform        |
| Base/Neutral Organic<br>Compounds | Dissolved Oxygen (DO) |

- E. Methyl Tertiary-Butyl Ether (MTBE); is a chemical compound that is manufactured by the chemical reaction of methanol and isobutylene. MTBE is produced in very large quantities (over 200,000 barrels per day in the U.S. in 1999) and is almost exclusively used as a fuel additive in motor gasoline. It is one of a group of chemicals commonly known as "oxygenates" because they raise the oxygen content of gasoline. At room temperature, MTBE is a volatile, flammable and colorless liquid that dissolves rather easily in water.

Because MTBE dissolves easily in water and does not "cling" to soil very well, it migrates faster and farther in the ground than other gasoline components, thus making it more likely to migrate to groundwater extraction wells. MTBE does not degrade (breakdown) easily and is difficult and costly to remove from ground water.

On January 1, 1998, Senate Bill (SB) 521 was passed. SB521 adds language to the Health & Safety Code which is applicable to leaking underground storage tanks as follows: "Section 25299.37.1. No closure letter pursuant to this chapter shall be issued unless the soil or groundwater, or both, where applicable, at the site have been tested for Methyl Tertiary Butyl Ether (MTBE) and the results of that testing are known to the Regional Board." Subsequently, on February 20, 1998, the Regional Board, Site Mitigation & Cleanup Unit, issued written notification to interested parties of Mandatory MTBE Sampling For Underground Storage Tank (UST) Site Closures-Senate Bill (SB) 521. The February 20, 1998, notification specifies that "For ground water impacted sites or soil sites that may threaten ground water, both soil and ground water sampling and analysis for MTBE will be required."

Sections 13272.1 and Section 13285 of the CWC address discharges of MTBE. The California Department of Health Services (DHS) adopted limits for Maximum Contaminant Levels for MTBE. The Primary MCL of 13 µg/L was adopted by DHS on May 17, 2000. The Secondary MCL (for taste and odor not health affects) of 5 µg/L was adopted on January 7, 1999. The UST program uses the more conservative secondary MCL of 5 µg/L.

F. Discharge Prohibitions

Discharges under this WDR are required to be nontoxic. Toxicity is the adverse response of organisms to chemicals or physical agents. This

prohibition is based on the Basin Plans, which require that all waters be maintained free of toxic substances in concentrations that are lethal or produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. The Basin Plans also require waters to be free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, or animal life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.

Mass emission rate limitations will be determined using the discharge flowrate and effluent concentration limitations specified in this WDR; therefore, the daily maximum discharge flowrate limitation for each discharge will be specified in the discharge Notice of Enrollment from the Regional Board. The discharge flowrate will be designated as the maximum discharge flowrate and the Discharger shall be prohibited from discharging in excess of the maximum discharge flowrate.

G. Technology-Based Effluent Limitations (TBELs)

1. Scope and Authority

The CWA requires that TBELs be established based on several levels of controls:

Best Practicable Treatment Control Technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. The BPT standards apply to toxic, conventional, and nonconventional pollutants.

Best Available Technology Economically Achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. The BAT standards apply to toxic and nonconventional pollutants.

Best Conventional Pollutant Control Technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

New Source Performance Standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.



The CWA requires USEPA to develop Effluent Limitations, Guidelines and Standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR section 125.3 of the NPDES regulations authorize the use of Best Professional Judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR section 125.3.

## 2. Applicable Technology-Based Effluent Limitations

The USEPA has not developed numeric Technology-Based effluent limitations for pollutants in discharges from groundwater extraction.

## H. Water Quality-Based Effluent Limitations (WQBELs)

### 1. Scope and Authority

As specified in 40 CFR section 122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, achieve applicable water quality objectives and criteria contained in state plans and policies, and meet water quality criteria in the CTR and NTR.

### 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The designated beneficial uses of surface waters throughout the State may include municipal, domestic, industrial, and agricultural supply; water contact and non-contact recreation; navigation; groundwater recharge and freshwater replenishment; hydropower generation; wildlife habitat; cold freshwater and warm freshwater habitat; fish migration and fish spawning; marine habitat; estuarine habitat; shellfish harvesting; ocean commercial and sport fishing; areas of special biological significance; and preservation of rare and endangered species. To the extent that the Basin Plan designates additional or different beneficial uses, the Basin Plan shall control.

### 3. Determining the Need for WQBELs

All applicable provisions of sections 301 and 402 of the CWA must be met for NPDES permits for discharges to surface waters. These provisions require controls of pollutant discharges that utilize BAT and BCT to reduce pollutant and any more stringent controls necessary to meet water quality standards.

As specified in the SIP, the Regional Board shall conduct an analysis for each priority pollutant with applicable criterion or objective to determine if a water quality-based effluent limitation is required.

Data are unavailable to conduct an analysis because this WDR as a general permit does not have a Report of Waste Discharge. Therefore, the discharger shall conduct an initial sample based on flow to determine the requirements.

The previous WDR Order No. 2000-90 did not differentiate discharges based on flows; however, WDR Order 2001-96 (*General Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for Groundwater Extraction Waste Discharges from Construction, Remediation, And Permanent Groundwater Extraction Projects To Surface Waters Within The San Diego Region except for San Diego Bay*) does differentiate discharges based on flows. The WDR 2001-96 does not require effluent limits for discharges less than 100,000 gallons per day that do not contain pollutants because lack of complaints of adverse impacts to water quality and/or beneficial uses of the receiving waters, and lack of documentation of adverse impacts to water quality and/or beneficial uses of the receiving waters.

Based on WDR Order No. 2001-96 the same could be assumed for discharges for San Diego Bay. However, to be environmentally conservative only half of the discharge will be assumed. Instead of differentiating the discharge by 100,000 gallons per day, this WDR will differentiate the flow by 50,000 gallons per day.

#### Reasonable Potential Analysis

In order to determine what to sample and frequency an initial set of data is needed.

If the discharger proposes to discharge less than 50,000 gallons per day, then the discharger shall initially conduct Annual Monitoring Program A (sample for the entire constituents listed in III.D. and MTBE for a total of 38 constituents).

However, if the discharger proposes to discharge 50,000 gallons per day or more, then the discharger shall initially conduct Annual Monitoring Program B (sample the entire constituents listed in III.D., MTBE, and all 126 priority pollutants).

Based on the initial monitoring program if the discharge will require no treatment to meet the discharge specifications of this WDR, then the discharger will conduct Annual Monitoring Program A (if discharging less than 50,000 gallons per day) or Annual Monitoring Program B (if

discharging 50,000 gallons per day or more) once per year. This will provide data to identify reasonable potential for future effluent limits.

If the discharge will require treatment prior to discharge, then in addition to the Annual Monitoring Program listed above, the discharger will also monitor for all the constituents listed in the discharge specification with effluent limits at the frequency required in the Monitoring and Reporting Program stated in Attachment E because of the reasonable potential of exceeding the effluent limits in the discharge specifications of this WDR.

If there are any contaminated sites within the radius of influence of the groundwater extraction activities, then the constituent of concern will be monitored at the frequency required in the Monitoring and Reporting Program stated in Attachment E because of the reasonable potential of exceeding the effluent limits in the discharge specifications of this WDR. If the constituent of concern is not listed in the Monitoring and Reporting Program stated in Attachment E then a monitoring and reporting frequency will be stated in the Notice of Enrollment.

Table summarizing effluent limits and monitoring

| Category 1        |   |   |
|-------------------|---|---|
| Threat Level      | High Threat                               |   |
| CONDITION         |   |   |
| Flow              | Low Flow                                  | High Flow                                 |
| Treatment         | Treatment Required                        | Treatment Required                        |
| Contaminated site |   |   |
| MONITORING        |   |   |
| Annual            | Annual Monitoring<br>38 Constituents      | Annual Monitoring<br>~160 Constituents    |
| Regular           | Regular monitoring<br>for 38 constituents | Regular monitoring for 38<br>constituents |

| Category 2        |  |  |
|-------------------|--|--|
| Threat Level      | Moderate Threat  |  |
| CONDITION         |  |  |
| Flow              | Low Flow   | High Flow  |
| Treatment         | No Treatment   | No Treatment   |
| Contaminated site | Pumping within zone of radius of contaminated site                 | Pumping within zone of radius of contaminated site                 |
| MONITORING        |  |  |
| Annual            | Annual Monitoring<br>38 Constituents                               | Annual Monitoring<br>~160 Constituents                             |
| Regular           | Regular monitoring for Constituent of Concern of contaminated site | Regular monitoring for Constituent of Concern of contaminated site |

| Category 3        |                                      |  |
|-------------------|--------------------------------------|--|
| Threat Level      | Low Threat                           |  |
| CONDITION         |                                      |  |
| Flow              | Low Flow                             | High Flow                              |
| Treatment         | No Treatment                         | No Treatment                           |
| Contaminated site |                                      |  |
| MONITORING        |                                      |  |
| Annual            | Annual Monitoring<br>38 Constituents | Annual Monitoring<br>~160 Constituents |
| Regular           | None                                 | None                                   |

#### 4. WQBEL Calculations

The Average Monthly Effluent and Maximum Daily Effluent WQBELs were calculated using a statistical approach with the following considerations and assumptions:

No dilution credit is considered for the discharge. Therefore, the discharge must comply with the Water Quality Objective at the point of discharge.

The WQBEL based on the CTR were implemented using the procedure list in the SIP. The procedure is listed below with copper as the example.

CTR/SIP calculations - Copper Example:

Criteria for Priority Toxic Pollutant in the State of California is described in the CTR table listed in 40 CFR 131.38.

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| A                              |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|--------------------------------|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                     | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 1. Antimony                    | 7440380       |  |   |  |   | 14 a,s  | 4300 a,i                          |
| 2. Arsenic <sup>a</sup>        | 7440382       | 340 i,m,w  | 150 i,m,w   | 60 i,m   | 36 i,m  |   |                                   |
| 3. Beryllium                   | 7440417       |  |   |  |   | n   | n                                 |
| 4. Cadmium <sup>b</sup>        | 7440439       | 4.3 e,i,m,w,x                                    | 2.2 e,i,m,w   | 42 i,m   | 9.3 i,m   | n   | n                                 |
| 5a. Chromium (III)             | 16065831      | 550 e,i,m,o                                      | 180 e,i,m,o   |  |   | n   | n                                 |
| 5b. Chromium (VI) <sup>b</sup> | 18540299      | 16 i,m,w   | 11 i,m,w  | 1100 i,m   | 50 i,m  | n   | n                                 |
| 6. Copper <sup>b</sup>         | 7440508       | 13 e,i,m,w,x                                     | 9.0 e,i,m,w   | 4.8 i,m  | 3.1 i,m   | 1300  |                                   |

Saltwater criterion maximum concentration (CMC) = 4.8 µg/L

Saltwater criterion continuous concentration (CCC) = 3.1 µg/L

The SIP requires that discharge effluent limitations be specified as total recoverable concentrations and converted to dissolved concentration for determining compliance with water quality criteria. Effluent limitations as a total recoverable concentration are also required by 40 CFR 122.45(c). The WDR includes effluent limitations as a total recoverable concentration for the discharge.

The SIP specifies use of a conversion factor to adjust a criterion expressed as a dissolved form to a total recoverable form. The CTR specifies the use of a conversion factor (CF). The dissolved criterion is divided by the CF to calculate the total recoverable concentration.

The CF for saltwater acute criteria recommended for converting a metal criterion expressed as the total recoverable fraction in the water column to a criterion expressed

as the dissolved fraction in the water column is described in Table 2 of 40 CFR 131.38.

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(iv) Table 2 to paragraph (b)(2) of this section:

| Metal                | Conversion factor (CF) for freshwater acute criteria | CF for freshwater chronic criteria | CF for saltwater acute criteria | CF for saltwater chronic criteria |
|----------------------|--|------------------------------------|---------------------------------|-----------------------------------|
| Antimony .....       | ( <sup>d</sup> )                                     | ( <sup>d</sup> )                   | ( <sup>d</sup> )                | ( <sup>d</sup> )                  |
| Arsenic .....        | 1.000  | 1.000                              | 1.000                           | 1.000                             |
| Beryllium .....      | ( <sup>d</sup> )                                     | ( <sup>d</sup> )                   | ( <sup>d</sup> )                | ( <sup>d</sup> )                  |
| Cadmium .....        | 0.944  | 0.909                              | 0.994                           | 0.994                             |
| Chromium (III) ..... | 0.316  | 0.860                              | ( <sup>d</sup> )                | ( <sup>d</sup> )                  |
| Chromium (VI) .....  | 0.982  | 0.962                              | 0.993                           | 0.993                             |
| Copper .....         | 0.960  | 0.960                              | 0.83                            | 0.83                              |

CF for copper = 0.83

Total recoverable concentration = Dissolved concentration criterion / CF

Dissolved concentrations for copper:

4.8 µg/L dissolved (CMC) / 0.83 (CF) = 5.8 µg/L total recoverable for CMC

3.1 µg/L dissolved (CCC) / 0.83 (CF) = 3.7 µg/L total recoverable for CCC

Effluent variability multiplier and Coefficient of Variation (CV)

For each concentration based on an aquatic life criterion, the long-term average (LTA) is calculated by multiplying the concentration with a factor that adjusts for effluent variability. The multiplier can be found in Table 1 of the SIP. Since this is a WDR without existing data points, the number of effluent data points is less than ten; the CV shall be set equal to 0.6 per the SIP.

Table 1. Effluent Concentration Allowance (ECA)  
Multipliers for Calculating Long-Term Averages (LTAs)

| Coefficient Of Variation (CV) | Acute Multiplier                                   | Chronic Multiplier                                 |
|-------------------------------|--|--|
|                               | 99 <sup>th</sup> Percentile Occurrence Probability | 99 <sup>th</sup> Percentile Occurrence Probability |
| 0.1                           | 0.797  | 0.891  |
| 0.2                           | 0.643  | 0.797  |
| 0.3                           | 0.527  | 0.715  |
| 0.4                           | 0.440  | 0.643  |
| 0.5                           | 0.373  | 0.581  |
| 0.6                           | 0.321  | 0.527  |

Therefore, from Table 1 of the SIP, the effluent variability multiplier will be as follows:

Acute Multiplier = 0.321

Chronic Multiplier = 0.527

The long-term average (LTA) is calculated by multiplying the dissolved concentrations for copper with the acute and chronic multipliers:

LTA acute =  $5.8 \mu\text{g/L} * 0.321 = 1.9 \mu\text{g/L}$

LTA chronic =  $3.7 \mu\text{g/L} * 0.527 = 2.0 \mu\text{g/L}$

The MDEL and AMEL will be based on the most limiting of the acute and chronic LTA, in the case for copper it will be LTA acute of  $1.9 \mu\text{g/L}$ .

Water quality-based effluent limits are calculated by multiplying the most limiting LTA with a factor (multiplier) that adjusts for the averaging periods and exceedance frequencies of the criteria and the effluent limitations. The multiplier can be found in Table 2 of the SIP. Since this is a WDR without existing data points, the CV will be set equal to 0.6 and since sampling frequency is four times a month or less, n shall be set equal to 4 per SIP (n=4).

Table 2. Long-Term Average (LTA) Multipliers for Calculating Effluent Limitations

| Coefficient of Variation | MDEL Multiplier                                    | AMEL Multiplier                                    |       |        | MDEL/AMEL Multiplier  |       |        |
|--------------------------|--|--|-------|--------|---|-------|--------|
|                          | 99 <sup>th</sup> Percentile Occurrence Probability | 95 <sup>th</sup> Percentile Occurrence Probability |       |        | MDEL = 99 <sup>th</sup> Percentile<br>AMEL = 95 <sup>th</sup> Percentile Occurrence Probability |       |        |
| (CV)                     |  | n = 4  | n = 8 | n = 30 | n = 4   | n = 8 | n = 30 |
| 0.1                      | 1.25   | 1.08   | 1.06  | 1.03   | 1.16  | 1.18  | 1.22   |
| 0.2                      | 1.55   | 1.17   | 1.12  | 1.06   | 1.33  | 1.39  | 1.46   |
| 0.3                      | 1.90   | 1.26   | 1.18  | 1.09   | 1.50  | 1.60  | 1.74   |
| 0.4                      | 2.27   | 1.36   | 1.25  | 1.12   | 1.67  | 1.82  | 2.02   |
| 0.5                      | 2.68   | 1.45   | 1.31  | 1.16   | 1.84  | 2.04  | 2.32   |
| 0.6                      | 3.11   | 1.55   | 1.38  | 1.19   | 2.01  | 2.25  | 2.62   |

Therefore, from Table 2 of the SIP, the LTA multipliers will be as follows:

MDEL Multiplier = 3.11

AMEL Multiplier = 1.55

The MDEL and AMEL limits are calculated by multiplying the LTA with an LTA multiplier for each limit:

Maximum Daily Effluent Limit (MDEL) =  $1.9 \mu\text{g/L} * 3.11 = 5.8 \mu\text{g/L}$

Average Monthly Effluent Limit (AMEL) =  $1.9 \mu\text{g/L} * 1.55 = 2.9 \mu\text{g/L}$

# I. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) tests measure the aggregate toxic effect of a mixture of pollutants that may be present in a waste stream and provides information on potential toxic impacts to receiving waters from the discharge of wastes. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach provides a means of assessing compliance with the narrative toxicity water quality objective for aquatic life protection of the Basin Plan while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and development.

The SIP requires that a Toxicity Reduction Evaluation (TRE) be conducted if a discharge causes or contributes to chronic toxicity in a receiving water body. This WDR requires the Discharger to periodically monitor the toxicity of its discharge and to develop a TRE Workplan if the toxicity effluent limitations are exceeded.

# J. Anti-Backsliding Effluent Limitations

Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. The following limits designated with AB in the Final Effluent Limitations table below have the same limit as the previous permit.

# K. Final Effluent Limitations

## Summary of Water Quality-Based Effluent Limitations

### Discharge Point

### Summary of Water Quality-based Effluent Limitations Table

#### General / Inorganic / Biological

| Parameter               | Units | Effluent Limitations |                   |                    |                       |                 |
|-------------------------|-------|----------------------|-------------------|--------------------|-----------------------|-----------------|
|                         |       | AMEL                 | AWEL              | MDEL               | Instantaneous Maximum | 6-Month Median  |
| Settleable Solids       | ml/L  | 1.0 <sup>OP</sup>    | 1.5 <sup>OP</sup> | -                  | 3.0 <sup>OP</sup>     | -               |
| Total Suspended Solids  | mg/L  | 30 <sup>AB</sup>     | -                 | -                  | 50 <sup>AB</sup>      | -               |
| Hydrogen Sulfide        | µg/L  | 2 <sup>AB</sup>      | -                 | 4 <sup>AB</sup>    | 10 <sup>AB</sup>      | -               |
| Total Residual Chlorine | µg/L  | -                    | -                 | 8 <sup>OP</sup>    | 60 <sup>OP</sup>      | 2 <sup>OP</sup> |
| Cyanide                 | µg/L  | 0.5 <sup>CTR</sup>   |                   | 1.0 <sup>CTR</sup> | -                     | -               |
| Acute Toxicity          | Tua   |                      |                   | 0.3 <sup>OP</sup>  |                       |                 |



| Parameter        | Units          | Effluent Limitations                                  |      |                   |                       |                |
|------------------|----------------|---|------|-------------------|-----------------------|----------------|
|                  |                | AMEL  | AWEL | MDEL              | Instantaneous Maximum | 6-Month Median |
| Chronic Toxicity | Tuc            |   |      | 1.0 <sup>OP</sup> |                       |                |
| Total Coliform   | MPN/<br>100 ml |   |      |                   | 1000.0 <sup>AB</sup>  |                |
| Fecal Coliform   | MPN/<br>100 ml |   |      |                   | 200.0 <sup>AB</sup>   |                |
| pH               | Units          | Within limit of 6.0 to 9.0 at all times <sup>OP</sup> |      |                   |                       |                |

| Parameter             | Units | Effluent Limitations |      |      |                       |                |
|-----------------------|-------|----------------------|------|------|-----------------------|----------------|
|                       |       | AMEL                 | AWEL | MDEL | Instantaneous Minimum | 6-Month Median |
| Dissolved Oxygen (DO) | mg/L  |                      |      |      | > 5.0 <sup>AB</sup>   |                |

#### Petroleum

| Parameter                    | Units | Effluent Limitations |      |      |                       |                |
|------------------------------|-------|----------------------|------|------|-----------------------|----------------|
|                              |       | AMEL                 | AWEL | MDEL | Instantaneous Maximum | 6-Month Median |
| MTBE                         | µg/L  |                      |      |      | 5 <sup>DHS</sup>      |                |
| Benzene                      | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Ethylbenzene                 | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Toluene                      | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Xylene                       | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Total Petroleum Hydrocarbons | mg/L  | -                    | -    | -    | 0.5 <sup>AB</sup>     | -              |

#### Metals

| Parameter             | Units | Effluent Limitations |                       |                       |                |
|-----------------------|-------|----------------------|-----------------------|-----------------------|----------------|
|                       |       | AMEL                 | MDEL                  | Instantaneous Maximum | 6-Month Median |
| Arsenic               | µg/L  | 29.4 <sup>CTR</sup>  | 59.0 <sup>CTR</sup>   | -                     | -              |
| Cadmium               | µg/L  | 7.6 <sup>CTR</sup>   | 15.3 <sup>CTR</sup>   | -                     | -              |
| Chromium (hexavalent) | µg/L  | 41.1 <sup>CTR</sup>  | 82.5 <sup>CTR</sup>   | -                     | -              |
| Copper *              | µg/L  | 2.9 <sup>CTR</sup>   | 5.8 <sup>CTR</sup>    | -                     | -              |
| Lead                  | µg/L  | 7.0 <sup>CTR</sup>   | 14.0 <sup>CTR</sup>   | -                     | -              |
| Mercury               | µg/L  | 0.050 <sup>CTR</sup> | 0.1005 <sup>CTR</sup> | -                     | -              |
| Nickel                | µg/L  | 6.8 <sup>CTR</sup>   | 13.6 <sup>CTR</sup>   | -                     | -              |
| Silver                | µg/L  | 1.1 <sup>CTR</sup>   | 2.2 <sup>CTR</sup>    | -                     | -              |

| Parameter         | Units | Effluent Limitations |                     |                       |                |
|-------------------|-------|----------------------|---------------------|-----------------------|----------------|
|                   |       | AMEL                 | MDEL                | Instantaneous Maximum | 6-Month Median |
| Tributyltin (TBT) | µg/L  | 0.005 <sup>AB</sup>  |                     |                       |                |
| Zinc              | µg/L  | 47.3 <sup>CTR</sup>  | 95.0 <sup>CTR</sup> | -                     | -              |

Organics

| Parameter                            | Units | Effluent Limitations |                      |                       |                  |
|--------------------------------------|-------|----------------------|----------------------|-----------------------|------------------|
|                                      |       | AMEL                 | MDEL                 | Instantaneous Maximum | 6-Month Median   |
| Phenolic Compounds (non-chlorinated) | µg/L  | -                    | 120 <sup>OP</sup>    | 300 <sup>OP</sup>     | 30 <sup>OP</sup> |
| Chlorinated Phenolics                | µg/L  | 0.025 <sup>CTR</sup> | 0.049 <sup>CTR</sup> | 10 <sup>OP</sup>      | 1 <sup>OP</sup>  |
| 1,1,2,2-tetrachlorethane (PCA)       | µg/L  | 2.3 <sup>OP</sup>    | -                    | -                     | -                |
| 1,1,1-trichloroethane (TCA)          | µg/L  | 5.4E5 <sup>OP</sup>  | -                    | -                     | -                |
| 1,1,2-trichloroethane (TCA)          | µg/L  | 9.4 <sup>OP</sup>    | -                    | -                     | -                |
| 1,2-dichloroethane                   | µg/L  | 28 <sup>OP</sup>     | -                    | -                     | -                |
| Tetrachloroethene (PCE)              | µg/L  | 2.0 <sup>OP</sup>    | -                    | -                     | -                |
| Trichloroethylene (TCE)              | µg/L  | 27 <sup>OP</sup>     | -                    | -                     | -                |
| Vinyl chloride                       | µg/L  | 36 <sup>OP</sup>     | -                    | -                     | -                |
| Carbon tetrachloride                 | µg/L  | 0.90 <sup>OP</sup>   | -                    | -                     | -                |
| Base/Neutral Organic Compounds       | µg/L  |                      |                      | 10 <sup>AB</sup>      |                  |

<sup>OP</sup> Basis – Ocean Plan 2005

<sup>AB</sup> Basis – Anti-Backsliding, values from the previous permit

<sup>DHS</sup> Basis – Department of Health Services

<sup>CTR</sup> Basis – California Toxics Rule/ State Implementation Plan 2005

\* Copper discharge from the Shelter Island Basin watershed to San Diego Bay is prohibited.

Mass Limits

All permit limitations, standards or prohibitions shall be expressed in terms of mass except for pH, or other pollutants which cannot appropriately be

expressed by mass or under certain circumstances including "when applicable standards and limitations are expressed in terms of other units of measurement." (40 CFR § 122.45(f)(1)). Therefore, all concentration limits stated above except for Settleable Solids, Acute Toxicity, Chronic Toxicity, Total Coliform, Fecal Coliform, pH, and Dissolved Oxygen shall also have a mass limit based on its concentration limit times the discharge flow limit in the Notice of Enrollment expressed in pounds per day (lbs/d) as shown in the equations below:

$$\begin{aligned} \text{Concentration Limit} * \text{Flow Limit} * \text{Conversion Factor} &= \text{Mass Limit} \\ (\text{mg/l}) * (\text{MGD}) * 8.34 (\text{lb} * \text{L} / (\text{Million Gallons} * \text{mg})) &= \text{lbs/day} \\ (\mu\text{g/l}) * (\text{MGD}) * 0.00834 (\text{lb} * \text{L} / (\text{Million Gallons} * \mu\text{g})) &= \text{lbs/day} \\ (\text{mg/l}) * (\text{gpd}) * 0.00000834 (\text{lb} * \text{L} / (\text{Gallons} * \text{mg})) &= \text{lbs/day} \\ (\mu\text{g/l}) * (\text{gpd}) * 0.0000000834 (\text{lb} * \text{L} / (\text{Million Gallons} * \mu\text{g})) &= \text{lbs/day} \end{aligned}$$

- L. Interim Effluent Limitations (Not Applicable)
- M. Land Discharge Specifications (Not Applicable)
- N. Reclamation Specifications (Not Applicable)

#### IV. Rationale for Receiving Water Limitations

##### A. Surface Water

Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan. The discharge of groundwater extraction waste from any site shall not, separately or jointly with any other discharge, cause violations of the following water quality objectives in San Diego Bay.

##### 1. Bacterial Characteristics

##### a. Water-Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water-contact sports, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- (1) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).
- (2) The fecal coliform density based on a minimum of not less than five samples for any 30-day period shall not exceed a

geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

b. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- 1) The median total coliform density shall not exceed 70 per 100 ml; and
- 2) Not more than 10 percent of the samples shall exceed 230 per 100 ml.

2. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible.
- b. The discharge of waste shall not cause aesthetically undesirable discoloration of the surface of San Diego Bay.
- c. Natural light shall not be significantly reduced.
- d. The rate of deposition of solids and the characteristics of inert solids in San Diego Bay sediments shall not be changed such that benthic communities are degraded.

3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste materials.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- d. The concentration of substances set forth in the Discharge Specifications in marine sediments shall not be increased to levels which would degrade indigenous biota.
- e. The concentration of organic materials in San Diego Bay sediments shall not be increased to levels which would degrade marine life.
- f. Nutrient materials shall not cause objectionable aquatic growth or degrade indigenous biota.

4. Biological Characteristics

- a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
- b. The natural taste, odor, and color of fish, shellfish, or other aquatic resources used for human consumption shall not be altered.

- c. The concentration of organic materials in fish, shellfish or other aquatic resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

5. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

6. Toxic Materials Limitations

Since there is no dilution, toxic materials limits are the same as the effluent limits.

## V. Rationale for Monitoring and Reporting Requirements

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Board to require technical and monitoring reports. The MRP, Attachment E of this WDR, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this permit.

A. Influent Monitoring (Not applicable)

B. Effluent Monitoring

In reviewing the monitoring reports, the State Board found that although Dischargers were reporting Total Petroleum Hydrocarbons (TPH), a distinction between diesel and gasoline was not always made. Results for TPH should be reported as total TPH, TPH diesel (TPH-d), and TPH gasoline (TPH-g). Also, for detections of TPH-g, the amount of benzene, ethylbenzene, toluene, and xylene should be reported. Benzene, ethylbenzene, and toluene are priority pollutants. (40 CFR § 131).

C. Whole Effluent Toxicity (WET) Testing Requirements

A WET Limit is required if a discharge causes, has a reasonable potential to cause, or contributes to an exceedance of applicable water quality standards, including numeric and narrative. Since these types of discharges are prohibited under this WDR, WET limits are not applicable.

D. Receiving Water Monitoring

States are required to adopt numeric criteria where they are necessary to protect designated uses. (CWA §§ 303(a) – 303(c)). The Regional Board adopted numeric criteria in the Basin Plan. The Basin Plan is a regulatory reference for meeting the State and Federal requirements for water quality control. (40 CFR 131.20). State Board Resolution 68-16, the Antidegradation Policy, does not allow changes in water quality less than that prescribed in Water Quality Control

Plans (Basin Plans). The Basin Plan states that; "The numerical and narrative water quality objectives define the least stringent standards that the Regional Water Board will apply to regional waters in order to protect the beneficial uses." This WDR contains Receiving Water Limitations based on the Basin Plan numerical and narrative water quality objectives for Biostimulatory Substances, Chemical Constituents, Color, Dissolved Oxygen, Floating Material, Oil and Grease, pH, Pesticides, Radioactivity, Salinity, Sediment, Settleable Material, Suspended Material, Tastes and Odors, Temperature, Toxicity and Turbidity.

Section 13267 of the California Water Code states, in part,

(a) A regional board, in establishing ... waste discharge requirements ... may investigate the quality of any waters of the state within its region" and "(b) (1) In conducting an investigation ... the regional board may require that any person who ... discharges ... waste ... that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

The attached Monitoring and Reporting Program is issued pursuant to CWC section 13267. The groundwater monitoring and reporting program required by this WDR and the attached Monitoring and Reporting Program are necessary to determine compliance with these waste discharge requirements. The Discharger is responsible for the discharges of waste at the facility subject to this WDR.

E. Other Monitoring Requirements (Not Applicable)

## **VI. Rationale for Provisions**

A. Standard Provisions

Standard Provisions, which in accordance with 40 CFR sections 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D.

B. Special Provisions

1. Reopener Provisions (Not Applicable)
2. Special Studies and Additional Monitoring Requirements (Not Applicable)
3. Best Management Practices and Pollution Prevention Plan (Not Applicable)
4. Compliance Schedules (Not Applicable)
5. Construction, Operation, and Maintenance Specifications (Not Applicable)

6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)

7. Other Special Provisions

The Dischargers shall dispose of solids removed from liquid wastes in a manner that is consistent with Title 27 of the CCR and approved by the Regional Board.

VII. Public Participation

In considering the re-issuance and adoption of this WDR the Regional Board has developed a draft WDR. The Regional Board encouraged public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Board notified interested agencies and persons of its intent to prescribe waste discharge requirements in this WDR and provided them with an opportunity to submit their written comments and recommendations. On September 21, 2007, the Regional Board sent out notification through the Regional Board Agenda by an electronic mail list and by U.S. Postal Service. Notification was posted on the Regional Board's webpage on September 7, 2007, and published in the San Diego Union Tribune newspaper on September 5, 2007.

B. Written Comments

Interested persons were invited to submit written comments concerning the tentative WDR. Comments were to be submitted in person, by fax, email, or mail to the Executive Officer at the Regional Board at the address on the cover page of this Permit.

To be fully addressed and considered by the Regional Board, written comments should be submitted at the Regional Board office by 5 p.m. on October 3, 2007.

C. Public Hearing

The Regional Board held a public hearing on the tentative WDR during its regular meeting on the following date and at the following location:

Date: **October 10, 2007**  
Location: **Water Quality Control Board  
Regional Board Meeting Room  
9174 Sky Park Court  
San Diego, California**

Interested persons were invited to attend. At the public hearing, the Regional Board heard testimony pertinent to the discharge and WDR.

D. Information and Copying

WDR-related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. A partial list of these items are on the Regional Board's web site at: [www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

Copying of documents may be arranged through the Regional Board by calling (858) 467-2952.

E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDR was invited to contact the Regional Board, reference this WDR, and provide a name, address, and telephone number.

F. Additional Information

Requests for additional information or questions regarding this WDR may be directed to Vicente Rodriguez at (858) 627-3940 or at: [VRodriguez@waterboards.ca.gov](mailto:VRodriguez@waterboards.ca.gov)

This WDR will expire on October 10, 2012. Enrollees covered under this WDR at the time of expiration will be required to re-enroll under the reissued permit.





Linda S. Adams  
Secretary for  
Environmental Protection

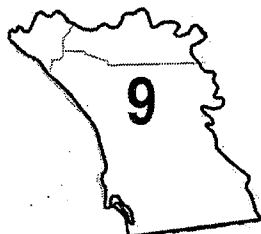
# California Regional Water Quality Control Board

## San Diego Region

9174 Sky Park Court, San Diego, CA 92123-4340  
(916) 341-5455 • FAX (916) 341-5463  
[www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)



Arnold Schwarzenegger  
Governor



### GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM GROUNDWATER EXTRACTION AND SIMILAR DISCHARGES TO SURFACE WATERS WITHIN THE SAN DIEGO REGION EXCEPT FOR SAN DIEGO BAY (WDR)

**ORDER NO. R9-2008-0002**  
**NPDES NO. CAG919002**

A Discharger, as described in the following table that has complied with the requirements for coverage under this General "Waste Discharge Requirements" (WDR), is subject to waste discharge requirements, once permit coverage is effective, as set forth in this WDR.

|             |   |
|-------------|---|
| Dischargers | Any person with discharges from ground water extraction activities to surface waters within the San Diego Region, except for San Diego Bay that do not cause, have the reasonable potential to cause, or contribute to an instream excursion above any applicable State or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water. |
|-------------|---|

|  |                |
|--|----------------|
| This WDR was adopted by the Regional Board on:   | March 12, 2008 |
| This WDR shall become effective on:  | March 12, 2008 |
| This WDR shall expire on:  | March 12, 2013 |
| The U.S. Environmental Protection Agency and the California Regional Water Quality Control Board, San Diego Region have classified these discharges as minor discharges. |                |

IT IS HEREBY ORDERED that Order No. 2001-96 is rescinded upon the effective date of this WDR except for enforcement purposes, as specified elsewhere in this Order, and; in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted therein, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted therein, Dischargers shall comply with the requirements in this WDR.

I, John H. Robertus, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region on March 12, 2008.

for John H. Robertus, Executive Officer

**California Environmental Protection Agency**

Recycled Paper



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## **I. DISCHARGE INFORMATION**

### **A. Groundwater Extraction**

Existing and proposed discharges of groundwater extraction waste to surface waters within the San Diego Region from construction groundwater extraction, foundation groundwater extraction and groundwater extraction related to groundwater remediation cleanup projects (collectively groundwater extraction):

1. Result from similar operations (all involve extraction and discharge of groundwater);
2. Are the same type of wastes (all are groundwater containing or potentially containing petroleum hydrocarbons, solvents, or other pollutants);
3. Require similar effluent limitations for the protection of the beneficial uses of similar receiving waters;
4. Require similar monitoring; and
5. Are more appropriately regulated under a general permit rather than individual permits.

## **II. PERMIT INFORMATION**

### **A. Application**

To obtain coverage under this WDR a Discharger must submit the following to the California Regional Water Quality Control Board, San Diego Region (Regional Board):

1. A Notice of Intent (NOI), including the following information:
  - a. Owner and Operator name;
  - b. Owner and Operator address;
  - c. Owner and Operator telephone number;
  - d. Site name
  - e. Site address
  - f. Type of discharges;
  - g. Name of receiving waterbody and conveyance(s);
2. An initial sampling and monitoring report;
3. A project map(s) that shows the essential features of the groundwater extraction system within the Regional Board boundary, and the corresponding surface water or storm drain to which water will be discharged; and
4. Payment of the application fee, equal to the first annual fee, made payable to "SWRCB."

The NOI form is included within this WDR package as Attachment B.

The WDR NOI, including, map(s), the application fee, and other attachments, must be submitted to the following address:

CRWQCB – San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

Attn: Groundwater Extraction to San Diego Region  
Core Regulatory Unit  
NOTICE OF INTENT

**B. Coverage**

Permit coverage will be effective when all of the following have occurred:

1. The Discharger has submitted a complete NOI application (including initial sampling and monitoring report), as determined by the Regional Board; and
2. The Regional Board issues the Discharger's a Notice of Enrollment, which includes the discharge flow limit, any additional or increase in monitoring due to specific circumstances of the discharge, and any other additional requirements.
3. Current dischargers enrolled in Order No. 2001-96 shall re-enroll no later than 365 days after adoption of this WDR, each discharger currently enrolled in Order No. 2001-96 shall continue to comply with Order No. 2001-96 until obtaining permit coverage under this WDR.

**C. Eligibility Criteria**

This WDR is intended to cover all discharges of groundwater extraction wastes to surface waters within the San Diego Region Except San Diego Bay, from groundwater extraction due to construction and other groundwater extraction activities regardless of volume, including discharges less than 100,000 gallons per day. Dischargers must meet the following criteria to be subject to waste discharge requirements by this WDR:

1. The discharge of extracted groundwater due to groundwater extraction activities is discharged to surface waters within San Diego Region except San Diego Bay;
2. Pollutant concentrations in the discharge comply with the Discharge Specifications of this WDR.

This WDR does not cover:

**STORM WATER** - Storm water runoff due to construction activities. These activities may be covered under the statewide general NPDES permit for storm water discharges associated with construction activities (CAS000002), the statewide general NPDES permit for storm water runoff associated with small linear underground/overhead construction projects (CAS000005), and/or Clean Water Act (CWA) Section 401 Water Quality Certifications.

**SANITARY SEWER** - Discharges to a sanitary sewer. These discharges do not need coverage under the NPDES Program. Contact the agency controlling the sanitary sewer for approval prior to discharging to its conveyance system.

**UTILITY VAULTS** - Discharges from utility vaults and underground structures. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water Order No. 2006-0008-DWQ (CAG990002).

**HYDROSTATIC/ POTABLE WATER** – Discharges from drinking water well development. These discharges are covered under Order No. R9-2002-0020 (CAG679001).

**D. Discharge to a Municipal Separate Storm Sewer System (MS4)**

Prior to discharging into an MS4, the Discharger shall demonstrate alternatives to discharging extracted groundwater waste into an MS4 and why it is technically or economically infeasible to implement these alternatives.

Without prior approval from the appropriate local agency with jurisdiction over the MS4, the discharger shall not discharge extracted groundwater waste under this WDR into an MS4.

Local agencies responsible for operating the MS4s may not passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the MS4 operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or control. These discharges may cause or contribute to a condition of contamination or a violation of water quality standards.

Therefore, at least 30 days prior to initiating an extracted groundwater discharge to an MS4, the Discharger shall notify and receive authorization from the appropriate local agency with jurisdiction over the MS4. This requirement encourages communication between Dischargers enrolled under this WDR and local agencies responsible for MS4s in an effort to reduce misunderstandings and concerns over the types of discharges covered by this WDR.

**E. Termination of Discharges**

Dischargers shall submit a written request referred to as a "Notice of Termination (NOT)" to this Regional Board when coverage under this WDR is no longer required. The NOT letter constitutes a notice that the owner (and his/her agent) of the site has ceased the discharge of ground water associated with the groundwater extraction activities at the site under this WDR.

The NOT should include "Notice of Termination (NOT)" in the subject line, the Waste Discharge Identification Number (WDID) assigned to the project by the Regional Board when enrolled in the WDR, the name and address of the owner, and be signed and dated by the owner in accordance with the signatory requirements of the WDR. The Discharger shall continue to comply with the

requirements of the WDR until the Regional Board approves the NOT. Submittal of a NOT letter does not guarantee termination. Approval of the NOT does not relieve the Discharger's responsibility for paying any applicable outstanding invoices of annual fees as a result of enrollment under this WDR, nor does it relieve the Discharger from enforcement from existing violations.

**F. Re-Enrollment of Renewed Permit**

Dischargers enrolled under previous General Permit Order No. 2001-96 that plan on continuing their discharge, must re-enroll by submitting an NOI to obtain coverage under this WDR. Re-enrollees shall re-enroll no later than 365 days after the date of adoption of this WDR to achieve compliance with the new effluent limitations and criteria established by this WDR.

**G. Transferring Ownership**

Enrollment under the WDR for a specific project is not transferable. In the event of any change in ownership of land or waste discharge facilities presently owned by the enrolled Discharger, the Discharger must notify the new succeeding owner of the existence of this WDR by letter 120 days prior to property transfer, a copy of which must be immediately forwarded to the Regional Board office. Additionally, the Discharger must submit a NOT to the Regional Board. The new succeeding owner must submit a new NOI in application of enrollment under this WDR.

**III. Findings**

The Regional Board finds:

**A. Background**

This WDR supersedes Order No. 2001-96. The NPDES No. CAG919002 remains the same. Dischargers enrolled under previous Order No. 2001-96 must obtain coverage under this new WDR to continue their discharge subject to waste discharge requirements in this WDR.

**B. Discharge Subject to Waste Discharge Requirements**

To be subject to waste discharge requirements in this WDR for continued and future discharge to waters of the United States, Dischargers must submit an NOI and obtain coverage in order to be regulated under this WDR as provided in 40 CFR section 122.28 (b)(2).

**C. Discharge Description**

Existing and proposed discharges of groundwater extraction waste to surface waters within the San Diego Region except San Diego Bay from construction groundwater extraction, foundation groundwater extraction and groundwater extraction related to groundwater remediation (collectively referred to as Groundwater Extraction).

#### **D. Legal Authorities**

These waste discharge requirements are issued pursuant to Sections 13263 and 13377 of the California Water Code (CWC). The Regional Board shall prescribe requirements as to the nature of any proposed discharge and shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act, also referred as the Clean Water Act (CWA).

These waste discharge requirements issued by the Regional Board shall also serve as an NPDES permit for point source discharges from groundwater extraction waste to surface waters within the San Diego Region except San Diego Bay.

States may request authority to issue general NPDES permits pursuant to 40 CFR section 122.28. On June 8, 1989, the California State Water Resources Control Board (State Board) submitted an application to USEPA requesting revisions to its NPDES Program in accordance with 40 CFR sections 122.28, 123.62, and 403.10. The application included a request to add general permit authority to its approved NPDES Program. On September 22, 1989, USEPA, Region 9, approved the State Board's request and granted authorization for the State of California to issue general NPDES permits.

#### **E. Background and Rationale for Requirements**

The Regional Board developed the requirements in this WDR based on information submitted as part of the applications for several like agencies, individuals, and entities, through monitoring and reporting programs, and through special studies. Attachments A through F, which contain background information and rationale for WDR requirements, are hereby incorporated into this WDR and constitute part of the Findings for this WDR.

#### **F. California Environmental Quality Act (CEQA)**

This action to adopt a NPDES permit is exempt from the provisions of CEQA (Public Resources Code section 21100, et seq.) in accordance with CWC section 13389.

#### **G. Technology-Based Effluent Limitations (TBELs)**

Permits shall include applicable TBELs and standards. (40 CFR § 122.44(a)). This WDR does not include numeric-TBELs because USEPA has not promulgated effluent limitation guidelines for groundwater extraction.

#### **H. Water Quality-Based Effluent Limitations (WQBELs)**

Permits shall include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. (40 CFR § 122.44(d)). Where numeric water quality criteria have not been established, WQBELs may be established using USEPA CWA section 304(a) criteria guidance, proposed State criteria or a State policy interpreting



narrative criteria supplemented with other relevant information, or an indicator parameter. (40 CFR § 122.44(d)).

**I. Water Quality Control Plan**

The Regional Board's Water Quality Control Plan for the San Diego Basin (hereinafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The Basin Plan was adopted by the Regional Board on September 8, 1994, and was subsequently approved by the State Board on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and the State Board.

In addition, State Board Resolution No. 88-63 establishes state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal and domestic supplies. Requirements of this WDR specifically implement the applicable provisions of the Basin Plan and State Board policy.

**J. National Toxics Rule (NTR) and California Toxics Rule (CTR)**

The USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995, and November 9, 1999. The CTR was adopted by USEPA on May 18, 2000, and amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to these discharges.

**K. State Implementation Policy**

On March 2, 2000, the State Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by USEPA through the NTR and to the priority pollutant objectives established by the Regional Boards in their Basin Plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the USEPA Regional Administrator. The alternate test procedures provision became effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for WQBELs and for calculating WQBELs. The SIP also requires Dischargers to submit sufficient data to make the determination, and if necessary to calculate the WQBELs. The State Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives, and provisions for chronic toxicity control. Requirements of this WDR implement the SIP.

**L. Compliance Schedules and Interim Requirements**

Current dischargers enrolled in Order No. 2001-96 shall re-enroll no later than 365 days after adoption of this WDR, each discharger currently enrolled in Order

No. 2001-96 shall continue to comply with Order No. 2001-96 until obtaining permit coverage under this WDR.

**M. Antidegradation Policy**

Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Board established California's antidegradation policy in State Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Boards' Basin Plans implement, and incorporate by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharges are consistent with the antidegradation provision of 40 CFR section 131.12 and State Board Resolution No. 68-16.

**N. Anti-Backsliding Requirements**

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations of 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this WDR are at least as stringent as the effluent limitations in the previous Order.

**O. Monitoring and Reporting**

Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

**P. Standard and Special Provisions**

Standard Provisions, which in accordance with 40 CFR sections 122.41 and 122.42 apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Board has also included in this WDR special provisions applicable to the enrolled Dischargers. A rationale for the special provisions contained in this WDR is provided in the attached Fact Sheet (Attachment F).

**Q. Notification of Interested Parties**

The Regional Board has notified the Dischargers, interested agencies and persons of its intent to prescribe WDRs for these discharges, and has provided them with an opportunity to submit their written comments and recommendations. Notification details are provided in the Fact Sheet (Attachment F) of this WDR.

#### **R. Consideration of Public Comment**

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharges. Details of the Public Hearing are provided in the Fact Sheet of this WDR.

#### **S. Alaska Rule**

On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 CFR section 131.21, 65 FR 24641, April 27, 2000). Under the revised regulation (also known as the Alaska rule), USEPA must approve new and revised standards submitted to USEPA after May 30, 2000, before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

#### **T. Ocean Plan**

In order to protect the beneficial uses of receiving waters from excessive concentrations of pollutants as a result of groundwater extraction waste discharges, this Order does not provide for a mixing zone or a zone of initial dilution except when the discharge is to the surf zone. This Order allows initial dilution of 3 in a surf zone.

### **IV. Discharge Prohibitions**

- A.** The discharge of wastewater at a location, or in a manner different from that described in the Findings, NOI, or Notice of Enrollment letter from the Regional Board is prohibited.
- B.** The discharge of wastewater shall not create or cause conditions of nuisance or pollution.
- C.** The discharge shall not cause, have a reasonable potential to cause, or contribute to an in-stream excursion above any applicable criterion promulgated by USEPA pursuant to section 303 of the CWA, or water quality objective adopted by the State or Regional Boards.
- D.** The discharge of waste to areas designated by the State Board as being of special (ASBS) biological significance is prohibited. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.
- E.** The discharge of groundwater extraction wastes from a specific site in excess of the flowrate specified in the Notice of Enrollment from the Regional Board is prohibited, unless the enrollee obtains a revised discharge Notice of Enrollment authorizing an increased flowrate.
- F.** The addition of pollutants to extracted groundwater to be discharged to surface waters within the San Diego Region except San Diego Bay is prohibited. The

only exception to this prohibition is that chemicals may be added to extracted groundwater to control biofouling in treatment systems, provided that extracted groundwater discharged meets the effluent limitations for such chemicals established by this WDR and in the discharge Notice of Enrollment issued by the Regional Board.

- G. The discharge of groundwater extraction wastes to surface waters within the San Diego Region except San Diego Bay is prohibited unless an NOI has been submitted, and the Regional Board has provided the Discharger with a written Notice of Enrollment identifying the discharge subject to waste discharge requirements.
- H. The discharge of groundwater extraction wastes from a groundwater remediation operation after the date groundwater has been remediated to the satisfaction of the Regional Board is prohibited.
- I. Compliance with Discharge Prohibitions contained in the Basin Plan is also required as a condition of this WDR.
- J. Discharges of wastes in a manner, or to a location which have not been specifically regulated by waste discharge requirements of this WDR are prohibited.
- K. The discharge of any radiological, chemical, or biological warfare agent, or high level radiological waste is prohibited.
- L. The dumping or deposition, from shore, of oil, garbage, trash, or other solid municipal, industrial, or agricultural waste directly into waters subject to tidal action or adjacent to waters subject to tidal action in any manner which may permit it to be washed into waters subject to tidal action is prohibited.
- M. The dumping or deposition of chemical agents or explosives into waters subject to tidal action is prohibited.

## **V. Effluent Limitations and Discharge Specifications**

### **A. Effluent Limitations**

#### **Summary of Water Quality-Based Effluent Limitations**

##### **Discharge Point**

##### **Summary of Water Quality-based Effluent Limitations Table**

### **1. DISCHARGES TO BAYS AND HARBORS**

The discharge of groundwater extraction waste to Mission Bay, Oceanside Harbor, Del Mar Boat Basin, or Dana Point Harbor shall not contain pollutants in excess of the following effluent limitations:

General / Inorganic / Biological

| Parameter               | Units          | Effluent Limitations                                  |                   |                   |                       |                 |
|-------------------------|----------------|---|-------------------|-------------------|-----------------------|-----------------|
|                         |                | AMEL  | AWEL              | MDEL              | Instantaneous Maximum | 6-Month Median  |
| Settleable Solids       | ml/L           | 1.0 <sup>OP</sup>                                     | 1.5 <sup>OP</sup> | -                 | 3.0 <sup>OP</sup>     | -               |
| Total Suspended Solids  | mg/L           | 30 <sup>AB</sup>                                      | -                 | -                 | 50 <sup>AB</sup>      | -               |
| Hydrogen Sulfide        | µg/L           | 2 <sup>AB</sup>                                       | -                 | 4 <sup>AB</sup>   | 10 <sup>AB</sup>      | -               |
| Total Residual Chlorine | µg/L           | -   | -                 | 8 <sup>OP</sup>   | 60 <sup>OP</sup>      | 2 <sup>OP</sup> |
| Acute Toxicity          | Tua            |   |                   | 0.3 <sup>OP</sup> |                       |                 |
| Chronic Toxicity        | Tuc            |   |                   | 1.0 <sup>OP</sup> |                       |                 |
| Total Coliform          | MPN/<br>100 ml |   |                   |                   | 1000.0 <sup>AB</sup>  |                 |
| Fecal Coliform          | MPN/<br>100 ml |   |                   |                   | 200.0 <sup>AB</sup>   |                 |
| pH                      | Units          | Within limit of 6.0 to 9.0 at all times <sup>OP</sup> |                   |                   |                       |                 |

| Parameter             | Units | Effluent Limitations |      |      |                       |                |
|-----------------------|-------|----------------------|------|------|-----------------------|----------------|
|                       |       | AMEL                 | AWEL | MDEL | Instantaneous Minimum | 6-Month Median |
| Dissolved Oxygen (DO) | mg/L  |                      |      |      | > 5.0 <sup>AB</sup>   |                |

Petroleum

| Parameter                    | Units | Effluent Limitations |      |      |                       |                |
|------------------------------|-------|----------------------|------|------|-----------------------|----------------|
|                              |       | AMEL                 | AWEL | MDEL | Instantaneous Maximum | 6-Month Median |
| MTBE                         | µg/L  |                      |      |      | 5 <sup>DHS</sup>      |                |
| Benzene                      | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Ethylbenzene                 | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Toluene                      | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Xylene                       | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Total Petroleum Hydrocarbons | mg/L  | -                    | -    | -    | 0.5 <sup>AB</sup>     | -              |

Metals

| Parameter         | Units | Effluent Limitations |      |                       |                |
|-------------------|-------|----------------------|------|-----------------------|----------------|
|                   |       | AMEL                 | MDEL | Instantaneous Maximum | 6-Month Median |
| Tributyltin (TBT) | µg/L  | 0.0014 <sup>OP</sup> |      |                       |                |

### Organics

| Parameter                            | Units | Effluent Limitations |                      |                       |                  |
|--------------------------------------|-------|----------------------|----------------------|-----------------------|------------------|
|                                      |       | AMEL                 | MDEL                 | Instantaneous Maximum | 6-Month Median   |
| Phenolic Compounds (non-chlorinated) | µg/L  | -                    | 120 <sup>OP</sup>    | 300 <sup>OP</sup>     | 30 <sup>OP</sup> |
| Chlorinated Phenolics                | µg/L  | 0.025 <sup>CTR</sup> | 0.049 <sup>CTR</sup> | 10 <sup>OP</sup>      | 1 <sup>OP</sup>  |
| 1,1,2,2-tetrachlorethane (PCA)       | µg/L  | 2.3 <sup>OP</sup>    | -                    | -                     | -                |
| 1,1,1-trichloroethane (TCA)          | µg/L  | 5.4E5 <sup>OP</sup>  | -                    | -                     | -                |
| 1,1,2-trichloroethane (TCA)          | µg/L  | 9.4 <sup>OP</sup>    | -                    | -                     | -                |
| 1,2-dichloroethane                   | µg/L  | 28 <sup>OP</sup>     | -                    | -                     | -                |
| Tetrachloroethylene (PCE)            | µg/L  | 2.0 <sup>OP</sup>    | -                    | -                     | -                |
| Trichloroethylene (TCE)              | µg/L  | 27 <sup>OP</sup>     | -                    | -                     | -                |
| Vinyl chloride                       | µg/L  | 36 <sup>OP</sup>     | -                    | -                     | -                |
| Carbon tetrachloride                 | µg/L  | 0.90 <sup>OP</sup>   | -                    | -                     | -                |
| Base/Neutral Organic Compounds       | µg/L  |                      |                      | 10 <sup>AB</sup>      |                  |

| Parameter        | Units | Effluent Limitations |                    |                       |                   |
|------------------|-------|----------------------|--------------------|-----------------------|-------------------|
|                  |       | AMEL                 | MDEL               | Instantaneous Maximum | 6-Month Median    |
| Ammonia (as N)   | µg/L  |                      | 2400 <sup>OP</sup> | 6000 <sup>OP</sup>    | 600 <sup>OP</sup> |
| Endosulfan       | ng/L  | -                    | 18 <sup>OP</sup>   | 27 <sup>OP</sup>      | 9 <sup>OP</sup>   |
| HCH              | ng/L  | -                    | 8 <sup>OP</sup>    | 12 <sup>OP</sup>      | 4 <sup>OP</sup>   |
| Dichloromethane  | µg/L  | 450 <sup>OP</sup>    | -                  | 5 <sup>AB</sup>       | -                 |
| Halomethanes     | µg/L  | -                    | -                  | 5 <sup>AB</sup>       | -                 |
| PAHs             | ng/L  | 8.8 <sup>OP</sup>    | -                  | -                     | -                 |
| TCDD Equivalents | pg/L  | 0.0039 <sup>OP</sup> | -                  | -                     | -                 |

| Parameter | Units | Effluent Limitations |                    |                       |                |
|-----------|-------|----------------------|--------------------|-----------------------|----------------|
|           |       | AMEL                 | MDEL               | Instantaneous Maximum | 6-Month Median |
| Turbidity | µg/L  | 75 <sup>OP</sup>     | 2.2 <sup>CTR</sup> | 225                   | -              |

| Parameter  | Units | Effluent Limitations   |                   |                       |                |
|--|-------|--|-------------------|-----------------------|----------------|
|  |       | AMEL   | AWEL              | Instantaneous Minimum | 6-Month Median |
| Turbidity  | NTU   | 75 <sup>OP</sup>   | 100 <sup>OP</sup> | 225 <sup>OP</sup>     | -              |
| Turbidity  | NTU   | Shall not exceed the turbidity of the receiving water. <sup>AB</sup> |                   |                       |                |
| 126 Priority Pollutants from "Inland Surface Waters" |       |  |                   |                       |                |

## 2. DISCHARGES TO LAGOONS/ESTUARIES

The discharge of groundwater extraction waste discharges to saline lagoons (only Buena Vista Lagoon is fresh water) and estuaries of the region shall not contain pollutants in excess of the following effluent limitations:

Includes limits to the Bays and Harbors Limitations

| Parameter   | Units | Effluent Limitations                                  |      |                       |                   |
|---|-------|---|------|-----------------------|-------------------|
|   |       | AMEL  | MDEL | Instantaneous Maximum | 6-Month Median    |
| Total Nitrogen  | mg/L  | -   | -    | 2.0 <sup>AB</sup>     | 1.0 <sup>AB</sup> |
| Total Phosphorus  | mg/L  | -   | -    | .0.2 <sup>AB</sup>    | 0.1 <sup>AB</sup> |
| pH  | Units | Within limit of 7.0 to 8.5 at all times <sup>AB</sup> |      |                       |                   |
| All Parameters and Effluent Limitations from “Bays and Harbors” |       |   |      |                       |                   |

## 3. DISCHARGES TO THE SURF ZONE

The discharge of groundwater extraction waste to the surf zone (3:1 dilution factor) shall not contain pollutants in excess of the following effluent limitations:

Discharges to the Surf Zone Calculation

The formula used to calculate effluent limits for constituents discharged to the surf zone is from Table B in the Ocean Plan except for Toxicity and Radioactivity.

$$Ce = Co + Dm(Co - Cs)$$

Ce = the effluent concentration limit, ug/L

Co = the concentration (water quality objective) to be met at the completion of initial dilution, ug/L

Dm = minimum probable initial dilution expressed as parts seawater per part wastewater

Dm = 3 from findings from the 2001-96 Order.  
Cs = background seawater concentration (see Table C), ug/L

| Table C<br>BACKGROUND SEAWATER CONCENTRATIONS (Cs) |           |
|--|-----------|
| Waste Constituent                                  | Cs (ug/L) |
| Arsenic  | 3         |
| Copper   | 2         |
| Mercury  | 0.0005    |
| Silver   | 0.16      |
| Zinc   | 8         |
| For all other Table B<br>parameters                | 0         |

## DISCHARGES TO THE SURF ZONE (3:1 DILUTION FACTOR)<sup>AB</sup>

| Parameter                                  | Units | Effluent Limitations |                         |                          |                    |
|--|-------|----------------------|-------------------------|--------------------------|--------------------|
|  |       | AMEL                 | MDEL                    | Instantaneous<br>Maximum | 6-Month<br>Median  |
| TCR  | µg/L  |                      | 32 <sup>OP</sup>        | 240 <sup>OP</sup>        | 8 <sup>OP</sup>    |
| Ammonia (as<br>Nitrogen)                   | µg/L  |                      | 9600 <sup>OP</sup>      | 24,000 <sup>OP</sup>     | 2400 <sup>OP</sup> |
| Arsenic                                    | µg/L  |                      | 119 <sup>OP</sup>       | 311 <sup>OP</sup>        | 23 <sup>OP</sup>   |
| Cadmium                                    | µg/L  |                      | 16 <sup>OP</sup>        | 40 <sup>OP</sup>         | 4 <sup>OP</sup>    |
| Chromium<br>(hexavalent)                   | µg/L  |                      | 32 <sup>OP</sup>        | 80 <sup>OP</sup>         | 8 <sup>OP</sup>    |
| Copper                                     | µg/L  |                      | 42 <sup>OP</sup>        | 114 <sup>OP</sup>        | 6 <sup>OP</sup>    |
| Lead                                       | µg/L  |                      | 32 <sup>OP</sup>        | 80 <sup>OP</sup>         | 8 <sup>OP</sup>    |
| Mercury                                    | µg/L  |                      | 0.64 <sup>OP</sup>      | 1.60 <sup>OP</sup>       | 0.16 <sup>OP</sup> |
| Nickel                                     | µg/L  |                      | 80 <sup>OP</sup>        | 200 <sup>OP</sup>        | 20 <sup>OP</sup>   |
| Silver                                     | µg/L  |                      | 10.7 <sup>OP</sup>      | 27.5 <sup>OP</sup>       | 2.32 <sup>OP</sup> |
| Zinc                                       | µg/L  |                      | 296 <sup>OP</sup>       | 776 <sup>OP</sup>        | 56 <sup>OP</sup>   |
| Cyanide                                    | µg/L  |                      | 16 <sup>OP</sup>        | 40 <sup>OP</sup>         | 4 <sup>OP</sup>    |
| Phenolic<br>Compounds<br>(Non-chlorinated) | µg/L  |                      | 480 <sup>OP</sup>       | 1200 <sup>OP</sup>       | 120 <sup>OP</sup>  |
| 1,1,2,2-<br>tetrachloroethane              | µg/L  |                      | 9.2 <sup>OP</sup>       |                          |                    |
| Tributyltin (TBT)                          | µg/L  |                      | 0.0056 <sup>OP</sup>    |                          |                    |
| 1,1,-<br>trichloroethane                   | µg/L  |                      | 2,160,000 <sup>OP</sup> |                          |                    |



| Parameter                    | Units | Effluent Limitations    |                        |                       |                     |
|------------------------------|-------|-------------------------|------------------------|-----------------------|---------------------|
|                              |       | AMEL                    | MDEL                   | Instantaneous Maximum | 6-Month Median      |
| 1,1,2-trichloroethane        | µg/L  |                         | 37.6 <sup>OP</sup>     |                       |                     |
| Carbon tetrachloride         | µg/L  |                         | 3.6 <sup>OP</sup>      |                       |                     |
| PCBs                         | µg/L  |                         | 0.000076 <sup>OP</sup> |                       |                     |
| Tetrachloroethylene          | µg/L  |                         | 8 <sup>OP</sup>        |                       |                     |
| Trichloroethylene            | µg/L  |                         | 108 <sup>OP</sup>      |                       |                     |
| Vinyl chloride               | µg/L  |                         | 144 <sup>OP</sup>      |                       |                     |
| Selenium                     | µg/L  |                         | 240 <sup>OP</sup>      | 600 <sup>OP</sup>     | 60 <sup>OP</sup>    |
| Endosulfan                   | µg/L  |                         | 0.072 <sup>OP</sup>    | 0.108 <sup>OP</sup>   | 0.036 <sup>OP</sup> |
| Endrin                       | µg/L  |                         | 0.016 <sup>OP</sup>    | 0.024 <sup>OP</sup>   | 0.008 <sup>OP</sup> |
| HCH                          | µg/L  |                         | 0.032 <sup>OP</sup>    | 0.048 <sup>OP</sup>   | 0.016 <sup>OP</sup> |
| Acrolein                     | µg/L  | 880 <sup>OP</sup>       |                        |                       |                     |
| Antimony                     | µg/L  | 4800 <sup>OP</sup>      |                        |                       |                     |
| bis(2-chloroethoxy) methane  | µg/L  | 17.6 <sup>OP</sup>      |                        |                       |                     |
| bis(2-chloroisopropyl) ether | µg/L  | 4800 <sup>OP</sup>      |                        |                       |                     |
| Chlorobenzene                | µg/L  | 2280 <sup>OP</sup>      |                        |                       |                     |
| di-n-butyl phthalate         | µg/L  | 14,000 <sup>OP</sup>    |                        |                       |                     |
| Dichlorobenzenes             | µg/L  | 20,400 <sup>OP</sup>    |                        |                       |                     |
| 1,1-dichloroethylene         | µg/L  | 3.6 <sup>OP</sup>       |                        |                       |                     |
| Diethyl phthalate            | µg/L  | 132,000 <sup>OP</sup>   |                        |                       |                     |
| Dimethyl phthalate           | µg/L  | 3,280,000 <sup>OP</sup> |                        |                       |                     |
| 4,6-dinitro-2-methylphenol   | µg/L  | 880 <sup>OP</sup>       |                        |                       |                     |
| 2,4-dinitrophenol            | µg/L  | 16 <sup>OP</sup>        |                        |                       |                     |
| Ethylbenzene                 | µg/L  | 16,400 <sup>OP</sup>    |                        |                       |                     |
| Fluoranthene                 | µg/L  | 60 <sup>OP</sup>        |                        |                       |                     |
| Hexachlorocyclopentadiene    | µg/L  | 232 <sup>OP</sup>       |                        |                       |                     |

| Parameter                   | Units | Effluent Limitations   |      |                       |                |
|-----------------------------|-------|------------------------|------|-----------------------|----------------|
|                             |       | AMEL                   | MDEL | Instantaneous Maximum | 6-Month Median |
| Nitrobenzene                | µg/L  | 19.6 <sup>OP</sup>     |      |                       |                |
| Thallium                    | µg/L  | 8 <sup>OP</sup>        |      |                       |                |
| Acrylonitrile               | µg/L  | 0.4 <sup>OP</sup>      |      |                       |                |
| Aldrin                      | µg/L  | 0.000088 <sup>OP</sup> |      |                       |                |
| Benzene                     | µg/L  | 23.6 <sup>OP</sup>     |      |                       |                |
| Benzidine                   | µg/L  | 0.000276 <sup>OP</sup> |      |                       |                |
| Beryllium                   | µg/L  | 0.132 <sup>OP</sup>    |      |                       |                |
| Bis(2-chloroethyl) ether    | µg/L  | 0.18 <sup>OP</sup>     |      |                       |                |
| Bis(2-ethylhexyl) phthalate | µg/L  | 14 <sup>OP</sup>       |      |                       |                |
| Chlordane                   | µg/L  | 0.000092 <sup>OP</sup> |      |                       |                |
| Chloroform                  | µg/L  | 520 <sup>OP</sup>      |      |                       |                |
| DDT                         | µg/L  | 0.00068 <sup>OP</sup>  |      |                       |                |
| 3,3-dichlorobenzidine       | µg/L  | 0.0324 <sup>OP</sup>   |      |                       |                |
| 1,2-dichloroethane          | µg/L  | 112 <sup>OP</sup>      |      |                       |                |
| Dichloromethane             | µg/L  | 1,800 <sup>OP</sup>    |      |                       |                |
| 1,3-dichloropropene         | µg/L  | 35.6 <sup>OP</sup>     |      |                       |                |
| Dieldrin                    | µg/L  | 0.00016 <sup>OP</sup>  |      |                       |                |
| 2,4-dinitrotoluene          | µg/L  | 10.4 <sup>OP</sup>     |      |                       |                |
| 1,2-diphenylhydrazine       | µg/L  | 0.64 <sup>OP</sup>     |      |                       |                |
| Halomethanes                | µg/L  | 520 <sup>OP</sup>      |      |                       |                |
| Heptachlor                  | µg/L  | 0.0002 <sup>OP</sup>   |      |                       |                |
| Hexachlorobenzene           | µg/L  | 0.00084 <sup>OP</sup>  |      |                       |                |
| Hexachlorobutadiene         | µg/L  | 56 <sup>OP</sup>       |      |                       |                |
| Hexachloroethane            | µg/L  | 10 <sup>OP</sup>       |      |                       |                |

| Parameter              | Units | Effluent Limitations   |      |                       |                |
|------------------------|-------|------------------------|------|-----------------------|----------------|
|                        |       | AMEL                   | MDEL | Instantaneous Maximum | 6-Month Median |
| N-nitrosodimethylamine | µg/L  | 29.2 <sup>OP</sup>     |      |                       |                |
| N-nitrosodiphenylamine | µg/L  | 10 <sup>OP</sup>       |      |                       |                |
| PAHs                   | µg/L  | 0.0352 <sup>OP</sup>   |      |                       |                |
| TCDD equivalents       | µg/L  | 1.56E-08 <sup>OP</sup> |      |                       |                |
| Toxaphene              | µg/L  | 0.00084 <sup>OP</sup>  |      |                       |                |
| 2,4,6-trichlorophenol  | µg/L  | 1.16 <sup>OP</sup>     |      |                       |                |

| Parameter                    | Units | Effluent Limitations  |                   |                       |                   |
|------------------------------|-------|---|-------------------|-----------------------|-------------------|
|                              |       | AMEL  | AWEL              | Instantaneous Maximum | MDEL              |
| Settleable Solids            | ml/L  | 1 <sup>OP</sup>   | 1.5 <sup>OP</sup> | 3 <sup>OP</sup>       |                   |
| Suspended Solids             |       | 75% <sup>OP</sup> *   |                   |                       |                   |
|                              |       | *Suspended Solids AMEL is 75% removal unless the average monthly influent is 80 mg/L or less, then the effluent limit shall be 60 mg/L. <sup>OP</sup> |                   |                       |                   |
| pH                           |       | Within limit of 6.0 and 9.0 at all times. <sup>OP</sup>   |                   |                       |                   |
| Toluene                      |       | 340,000 <sup>OP</sup>   |                   |                       |                   |
| Xylene                       |       |   |                   | 5 <sup>AB</sup>       |                   |
| Total Petroleum Hydrocarbons |       |   |                   | 500 <sup>AB</sup>     |                   |
| Acute Toxicity               | TUa   |   |                   |                       | 0.3 <sup>OP</sup> |
| Chronic Toxicity             | TUc   |   |                   |                       | 1 <sup>OP</sup>   |
| Turbidity                    | NTU   | 75 <sup>OP</sup>  | 100 <sup>OP</sup> | 225 <sup>OP</sup>     |                   |

| Parameter      | Units      | Effluent Limitations   |      |                       |                      |
|----------------|------------|--|------|-----------------------|----------------------|
|                |            | AMEL   | AWEL | Instantaneous Maximum | Shellfish Harvesting |
| Total Coliform | MPN/100 mL | 1,000 <sup>OP</sup>  |      | 10,000 <sup>OP</sup>  |                      |
| Total Coliform | MPN/100 mL |  |      | 1,000 <sup>OP</sup> * |                      |
|                |            | *Total coliform density shall not exceed 1,000 per 100 mL when the ratio of fecal/total coliform exceeds 0.1 <sup>OP</sup> |      |                       |                      |
| Total Coliform |            |  |      |                       | 70 <sup>OP</sup> **  |

| Parameter      | Units      | Effluent Limitations   |      |                       |                      |
|----------------|------------|--|------|-----------------------|----------------------|
|                |            | AMEL   | AWEL | Instantaneous Maximum | Shellfish Harvesting |
| Total Coliform |            |  |      |                       | 230 <sup>OP</sup> ** |
|                |            | **The median total coliform density shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL. <sup>OP</sup> |      |                       |                      |
| Fecal Coliform | MPN/100 mL | 200 <sup>OP</sup>  |      | 400 <sup>OP</sup>     |                      |
| Enterococcus   | MPN/100 mL | 35 <sup>OP</sup>   |      | 104 <sup>OP</sup>     |                      |

| Parameter             | Units | Effluent Limitations |      |      |                       |                |
|-----------------------|-------|----------------------|------|------|-----------------------|----------------|
|                       |       | AMEL                 | AWEL | MDEL | Instantaneous Minimum | 6-Month Median |
| Dissolved Oxygen (DO) | mg/L  |                      |      |      | 5.0 <sup>AB</sup>     |                |

<sup>OP</sup> Basis – Ocean Plan 2005

<sup>AB</sup> Basis – Anti-Backsliding, values from the previous permit

<sup>DHS</sup> Basis – Department of Health Services

<sup>CTR</sup> Basis – California Toxics Rule/ State Implementation Plan 2005

#### 4. DISCHARGES TO INLAND SURFACE WATERS

The discharge of groundwater extraction waste to inland surface waters (including Buena Vista Lagoon) shall not contain pollutants in excess of the following effluent limitations:

##### GENERAL CONSTITUENTS

| Constituent            | Unit  | AMEL   | Daily Maximum | Instantaneous Maximum | Basis |
|------------------------|-------|--|---------------|-----------------------|-------|
| Settleable Solids      | ml/L  | 0.1  | ---           | 0.2                   | AB    |
| Total Suspended Solids | mg/L  | 30   | ---           | 50                    |       |
| Percent Sodium         | %     | ---  | ---           | 60                    | AB    |
| Total Nitrogen         | mg/L  | 1.0  |               | 2.0                   | "     |
| Total Phosphorus       | mg/L  | 0.1  |               | 0.2                   | "     |
| Methylene Blue         |       |  |               |                       |       |
| Active Substances      | mg/L  | ---  | ---           | 0.5                   | "     |
| Turbidity              | NTU   | Shall not exceed the ambient turbidity of the surface water at any time. |               |                       | "     |
| Fluoride               | mg/L  | ---  | ---           | 1.0                   | "     |
| Hydrogen Sulfide       | µg/L  | 2  | 4             | 10                    | AB    |
| Total Residual         |       |  |               |                       |       |
| Chlorine (TRC)         | µg/L  | 2  | 8             | 10                    | AB    |
| pH                     | Units | Within the limits of 6.5 and 8.5 at all times.                           |               |                       | AB    |
| Acute Toxicity         | TUa   | ---  | ---           | 0.59                  | AB    |
| Chronic Toxicity       | TUc   | ---  | 1             | ---                   | AB    |

| Constituent      | Unit      | AMEL  | Daily<br>Maximum | Instantaneous<br>Maximum | Basis |
|------------------|-----------|---|------------------|--------------------------|-------|
| Dissolved Oxygen | mg/L      | Shall not be less than 5.0 at any time in waters with designated warm fresh-water habitat beneficial uses or less than 6.0 in waters with cold fresh water habitat beneficial uses. |                  |                          | AB    |
| Total Coliform   | MPN/100mL | ---   | ---              | 1000                     | "     |
| Fecal Coliform   | MPN/100mL | ---   | ---              | 200                      | "     |

**VOLATILES, METALS, PRIORITY POLLUTANTS:**

| Beneficial Use:                            |   | Municipal/Potable Supply |       | Non-municipal/Non-potable |                          |           |
|--|---|--------------------------|-------|---------------------------|--------------------------|-----------|
| Constituent                                | Unit  | Instantaneous<br>Maximum | Basis | Unit                      | Instantaneous<br>Maximum | Basis     |
| Dibromochloropropane                       | µg/L  | 0.2                      | DOHS  | µg/L                      | 0.2                      | AB        |
| Ethylene Dibromide                         | µg/L  | 0.02                     | DOHS  | µg/L                      | 0.02                     | AB        |
| Xylene                                     | µg/L  | 5                        | AB    | µg/L                      | 5                        | AB        |
| Chlorinated Phenolics                      | µg/L  | 1                        | DOHS  | µg/L                      | 10                       | AB        |
| Remaining Base/Neutral Compounds           | µg/L  | 10                       | AB    | µg/L                      | 10                       | AB        |
| Total Petroleum Hydrocarbons               | mg/L  | 0.5                      | "     | mg/L                      | 0.5                      | AB        |
| Iron**                                     | mg/L  | 0.3                      | "     | mg/L                      | 0.3                      | AB        |
| Manganese                                  | mg/L  | 0.05                     | "     | mg/L                      | 0.05                     | AB        |
| MTBE                                       | µg/L  | 5                        | DOHS  |                           |                          |           |
| 126 Priority Pollutants (Including metals) | 40 CFR 131.38 - Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California. |                          |       |                           |                          | See Below |

126 Priority Pollutants - 40 CFR 131.38 - Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California.

The effluent limits for eight priority pollutants will be developed on a case-by-case basis because the freshwater criteria are based on site-specific water quality data.

Seven metals are dependent on water hardness, Cadmium, Copper, Chromium (III), Lead, Nickel, Silver, and Zinc [See Table 1 to 40 CFR 131.38(b)(2)], and the "Conversion Factors" for Cadmium and Lead are also water hardness dependent. [See Table 3 of 40 CFR 131.38(b)(2)]

In order to calculate the effluent limits for these seven metals the following equations from 40 CFR 131.38(b)(2) will be needed:

$$\begin{aligned} \text{Cd CFa} &= 1.136672 - ((\text{LN}(\text{hardness})) * 0.041838) \\ \text{Cd CFc} &= 1.101672 - ((\text{LN}(\text{hardness})) * 0.041838) \\ \text{Pb CFa\&c} &= 1.46203 - ((\text{LN}(\text{hardness})) * 0.145712) \\ \text{Criterion} &= \text{WER} * \text{CFx} * (\exp(\text{mA} * \text{LN}(\text{hardness})) + \text{bA}) \end{aligned}$$

Pentachlorophenol is dependent on the pH value. [See Footnote "f" to Table in 40 CFR 131.38(b)(1)]

To calculate the effluent limit for Pentachlorophenol use this equation:  
 $CMC = \exp(1.005(pH) - 4.869)$ .  $CCC = \exp(1.005(pH) - 5.134)$

The remainder of the criteria is not water quality dependent and the effluent limits can be calculated. However, not all the effluent limits will apply to all sites because of the Beneficial use designation for "Municipal" may not apply to all sites.

### Effluent Limits for Human Health Municipal and Non-Municipal

|    |                       | Human Health |          |         |         |
|----|-----------------------|--------------|----------|---------|---------|
|    |                       | MUN          |          | NON-MUN |         |
|    |                       | AMEL         | MDEL     | AMEL    | MDEL    |
|    |                       | (µg/L)       | (µg/L)   | (µg/L)  | (µg/L)  |
| A  |                       |              |          |         |         |
| 1  | Antimony              | 14           | 28       | 4300    | 8600    |
| 2  | Arsenic               |              |          |         |         |
| 3  | Beryllium             |              |          |         |         |
| 4  | Cadmium               |              |          |         |         |
| 5a | Chromium (III)        |              |          |         |         |
| 5b | Chromium (IV)         |              |          |         |         |
| 6  | Copper                | 1300         | 2600     |         |         |
| 7  | Lead                  |              |          |         |         |
| 8  | Mercury               | 0.05         | 0.1      | 0.051   | 0.1     |
| 9  | Nickel                |              |          |         |         |
| 10 | Selenium              |              |          |         |         |
| 11 | Silver                |              |          |         |         |
| 12 | Thallium              |              |          |         |         |
| 13 | Zinc                  | 700          | 1400     | 220000  | 440000  |
| 14 | Cyanide               | 7000000      | 14000000 |         |         |
| 15 | Asbestos              | 1.3E-08      | 2.6E-08  | 1.4E-08 | 2.8E-08 |
| 16 | 2,3,7,8-TCDD (Dioxin) | 320          | 640      | 780     | 1600    |
| 17 | Acrolein              | 0.059        | 0.12     | 0.66    | 1.3     |
| 18 | Acrylonitrile         | 1.2          | 2.4      | 71      | 140     |
| 19 | Benzene               | 4.3          | 8.6      | 360     | 720     |
| 20 | Bromoform             | 0.25         | 0.5      | 4.4     | 8.8     |
| 21 | Carbon Tetrachloride  | 680          | 1400     | 21000   | 42000   |
| 22 | Chlorobenzene         | 0.41         | 0.82     | 34      | 68      |
| 23 | Chlorodibromomethane  |              |          |         |         |

|    |                            | Human Health |        |         |         |
|----|----------------------------|--------------|--------|---------|---------|
|    |                            | MUN          |        | NON-MUN |         |
|    |                            | AMEL         | MDEL   | AMEL    | MDEL    |
|    |                            | (µg/L)       | (µg/L) | (µg/L)  | (µg/L)  |
| 24 | Chloroethane               |              |        |         |         |
| 25 | 2-Chloroethylvinyl Ether   |              |        |         |         |
| 26 | Chloroform                 |              |        |         |         |
| 27 | Dichlorobromomethane       | 0.56         | 1.1    | 46      | 92      |
| 28 | 1,1-Dichloroethane         |              |        |         |         |
| 29 | 1,2-Dichloroethane         | 0.38         | 0.76   | 99      | 200     |
| 30 | 1,1-Dichloroethylene       | 0.057        | 0.11   | 3.2     | 6.4     |
| 31 | 1,2-Dichloropropane        | 0.52         | 1      | 39      | 78      |
| 32 | 1,3-Dichloropropylene      | 10           | 20     | 1700    | 3400    |
| 33 | Ethylbenzene               | 3100         | 6200   | 29000   | 58000   |
| 34 | Methyl Bromide             | 48           | 96     | 4000    | 8000    |
| 35 | Methyl Chloride            |              |        |         |         |
| 36 | Methylene Chloride         | 4.7          | 9.4    | 1600    | 3200    |
| 37 | 1,1,2,2-Tetrachloroethane  | 0.17         | 0.34   | 11      | 22      |
| 38 | Tetrachloroethylene        | 0.8          | 1.6    | 8.9     | 18      |
| 39 | Toluene                    | 6800         | 14000  | 200000  | 400000  |
| 40 | 1,2-Trans-Dichloroethylene | 700          | 1400   | 140000  | 280000  |
| 41 | 1,1,1-Trichloroethane      |              |        |         |         |
| 42 | 1,1,2-Trichloroethane      | 0.6          | 1.2    | 40      | 80      |
| 43 | Trichloroethylene          | 2.7          | 5.4    | 81      | 160     |
| 44 | Vinyl Chloride             | 2            | 4      | 530     | 1100    |
| 45 | 2-Chlorophenol             | 120          | 240    | 400     | 800     |
| 46 | 2,4-Dichlorophenol         | 93           | 190    | 790     | 1600    |
| 47 | 2,4-Dimethylphenol         | 540          | 1100   | 2300    | 4600    |
| 48 | 2-Methyl-4,6-Dinitrophenol | 13           | 27     | 770     | 1500    |
| 49 | 2,4-Dinitrophenol          | 70           | 140    | 14000   | 28000   |
| 50 | 2-Nitrophenol              |              |        |         |         |
| 51 | 4-Nitrophenol              |              |        |         |         |
| 52 | 3-Methyl-4-Chlorophenol    |              |        |         |         |
| 53 | Pentachlorophenol          | 0.28         | 0.56   | 8.2     | 16      |
| 54 | Phenol                     | 21000        | 42000  | 4500000 | 9000000 |
| 55 | 2,4,6-Trichlorophenol      | 2.1          | 4.2    | 6.5     | 13      |
| 56 | Acenaphthene               | 1200         | 2400   | 2700    | 5400    |

|    |                             | Human Health |         |         |         |
|----|-----------------------------|--------------|---------|---------|---------|
|    |                             | MUN          |         | NON-MUN |         |
|    |                             | AMEL         | MDEL    | AMEL    | MDEL    |
|    |                             | (µg/L)       | (µg/L)  | (µg/L)  | (µg/L)  |
| 57 | Acenaphthylene              |              |         |         |         |
| 58 | Anthracene                  | 9600         | 19000   | 110000  | 220000  |
| 59 | Benzidine                   | 0.00012      | 0.00024 | 0.00054 | 0.0011  |
| 60 | Benzo(a)Anthracene          | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 61 | Benzo(a)Pyrene              | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 62 | Benzo(b)Fluoranthene        | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 63 | Benzo(ghi)Perylene          |              |         |         |         |
| 64 | Benzo(k)Fluoranthene        | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 65 | Bis(2-Chloroethoxy)Methane  |              |         |         |         |
| 66 | Bis(2-Chloroethyl)Ether     | 0.031        | 0.062   | 1.4     | 2.8     |
| 67 | Bis(2-Chloroisopropyl)Ether | 1400         | 2800    | 170000  | 340000  |
| 68 | Bis(2-Ethylhexyl)Phthalate  | 1.8          | 3.6     | 5.9     | 12      |
| 69 | 4-Bromophenyl Phenyl Ether  |              |         |         |         |
| 70 | Butylbenzyl Phthalate       | 3000         | 6000    | 5200    | 10000   |
| 71 | 2-Chloronaphthalene         | 1700         | 3400    | 4300    | 8600    |
| 72 | 4-Chlorophenyl Phenyl Ether |              |         |         |         |
| 73 | Chrysene                    | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 74 | Dibenzo(a,h)Anthracene      | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 75 | 1,2 Dichlorobenzene         | 2700         | 5400    | 17000   | 34000   |
| 76 | 1,3 Dichlorobenzene         | 400          | 800     | 2600    | 5200    |
| 77 | 1,4 Dichlorobenzene         | 400          | 800     | 2600    | 5200    |
| 78 | 3,3'-Dichlorobenzidine      | 0.04         | 0.08    | 0.077   | 0.15    |
| 79 | Diethyl Phthalate           | 23000        | 46000   | 120000  | 240000  |
| 80 | Dimethyl Phthalate          | 310000       | 630000  | 2900000 | 5800000 |
| 81 | Di-n-Butyl Phthalate        | 2700         | 5400    | 12000   | 24000   |
| 82 | 2,4-Dinitrotoluene          | 0.11         | 0.22    | 9.1     | 18      |
| 83 | 2,6-Dinitrotoluene          |              |         |         |         |
| 84 | Di-nOctyl Phthalate         |              |         |         |         |
| 85 | 1,2-Diphenylhydrazine       | 0.04         | 0.08    | 0.54    | 1.1     |
| 86 | Fluoranthene                | 300          | 600     | 370     | 740     |
| 87 | Fluorene                    | 1300         | 2600    | 14000   | 28000   |
| 88 | Hexachlorobenzene           | 0.00075      | 0.0015  | 0.00077 | 0.0015  |
| 89 | Hexachlorobutadiene         | 0.44         | 0.88    | 50      | 100     |



|     |                                     | Human Health |         |         |         |
|-----|-------------------------------------|--------------|---------|---------|---------|
|     |                                     | MUN          |         | NON-MUN |         |
|     |                                     | AMEL         | MDEL    | AMEL    | MDEL    |
|     |                                     | (µg/L)       | (µg/L)  | (µg/L)  | (µg/L)  |
| 90  | Hexachlorocyclopentadiene           | 240          | 480     | 17000   | 34000   |
| 91  | Hexachloroethane                    | 1.9          | 3.8     | 8.9     | 18      |
| 92  | Inden(1,2,3-cd) Pyrene              | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 93  | Isophorone                          | 8.4          | 17      | 600     | 1200    |
| 94  | Naphthalene                         |              |         |         |         |
| 95  | Nitrobenzene                        | 17           | 34      | 1900    | 3800    |
| 96  | N-Nitrosodimethylamine              | 0.00059      | 0.0012  | 8.1     | 16      |
| 97  | N-Nitrosodi-n-Propylamine           | 0.005        | 0.01    | 1.4     | 2.8     |
| 98  | N-Nitrosodiphenylamine              | 5            | 10      | 16      | 32      |
| 99  | Phenanthrene                        |              |         |         |         |
| 100 | Pyrene                              | 960          | 1900    | 11000   | 22000   |
| 101 | 1,2,4-Trichlorobenzene              |              |         |         |         |
| 102 | Aldrin                              | 0.00013      | 0.00026 | 0.00014 | 0.00028 |
| 103 | alpha-BHC                           | 0.0039       | 0.0078  | 0.013   | 0.026   |
| 104 | beta-BHC                            | 0.014        | 0.028   | 0.046   | 0.092   |
| 105 | gamma-BHC                           | 0.019        | 0.038   | 0.063   | 0.13    |
| 106 | delta-BHC                           |              |         |         |         |
| 107 | Chlordane                           | 0.00057      | 0.0011  | 0.00059 | 0.0012  |
| 108 | 4,4'-DDT                            | 0.00059      | 0.0012  | 0.00059 | 0.0012  |
| 109 | 4,4'-DDE                            | 0.00059      | 0.0012  | 0.00059 | 0.0012  |
| 110 | 4,4'-DDD                            | 0.00083      | 0.0017  | 0.00084 | 0.0017  |
| 111 | Dieldrin                            | 0.00014      | 0.00028 | 0.00014 | 0.00028 |
| 112 | alpha-Endosulfan                    | 110          | 220     | 240     | 480     |
| 113 | beta-Endosulfan                     | 110          | 220     | 240     | 480     |
| 114 | Endosulfan Sulfate                  | 110          | 220     | 240     | 480     |
| 115 | Endrin                              | 0.76         | 1.5     | 0.81    | 1.6     |
| 116 | Endrin Aldehyde                     | 0.76         | 1.5     | 0.81    | 1.6     |
| 117 | Heptachlor                          | 0.00021      | 0.00042 | 0.00021 | 0.00042 |
| 118 | Heptachlor Epoxide                  | 0.0001       | 0.0002  | 0.00011 | 0.00022 |
| 119 | Polychlorinated biphenyls<br>(PCBs) | 0.00017      | 0.00034 | 0.00017 | 0.00034 |
| 120 | "                                   |              |         |         |         |
| 121 | "                                   |              |         |         |         |

|     |           | Human Health |        |         |        |
|-----|-----------|--------------|--------|---------|--------|
|     |           | MUN          |        | NON-MUN |        |
|     |           | AMEL         | MDEL   | AMEL    | MDEL   |
|     |           | (µg/L)       | (µg/L) | (µg/L)  | (µg/L) |
| 122 | "         |              |        |         |        |
| 123 | "         |              |        |         |        |
| 124 | "         |              |        |         |        |
| 125 | "         |              |        |         |        |
| 126 | Toxaphene | 0.00073      | 0.0015 | 0.00075 | 0.0015 |

### Effluent Limits for Freshwater and Saltwater

|           |                       | Freshwater |        | Saltwater |        |
|-----------|-----------------------|------------|--------|-----------|--------|
|           |                       | MDEL       | AMEL   | MDEL      | AMEL   |
|           |                       | (µg/L)     | (µg/L) | (µg/L)    | (µg/L) |
| <b>A</b>  |                       |            |        |           |        |
| <b>1</b>  | Antimony              |            |        |           |        |
| <b>2</b>  | Arsenic               | 250        | 120    | 59        | 29     |
| <b>3</b>  | Beryllium             |            |        |           |        |
| <b>4</b>  | Cadmium               | *          | *      | 16        | 8      |
| <b>5a</b> | Chromium (III)        | *          | *      |           |        |
| <b>5b</b> | Chromium (IV)         | 16         | 8.1    | 83        | 41     |
| <b>6</b>  | Copper                | *          | *      | 5.8       | 2.9    |
| <b>7</b>  | Lead                  | *          | *      | 14        | 7      |
| <b>8</b>  | Mercury               |            |        |           |        |
| <b>9</b>  | Nickel                | *          | *      | 14        | 6.8    |
| <b>10</b> | Selenium              | 8.2        | 4.1    | 120       | 58     |
| <b>11</b> | Silver                | *          | *      | 2.2       | 1.1    |
| <b>12</b> | Thallium              |            |        |           |        |
| <b>13</b> | Zinc                  | *          | *      | 95        | 47     |
| <b>14</b> | Cyanide               | 8.5        | 4.2    | 1         | 0.5    |
| <b>15</b> | Asbestos              |            |        |           |        |
| <b>16</b> | 2,3,7,8-TCDD (Dioxin) |            |        |           |        |
| <b>17</b> | Acrolein              |            |        |           |        |
| <b>18</b> | Acrylonitrile         |            |        |           |        |
| <b>19</b> | Benzene               |            |        |           |        |
| <b>20</b> | Bromoform             |            |        |           |        |
| <b>21</b> | Carbon Tetrachloride  |            |        |           |        |

|    |                            | Freshwater |        | Saltwater |        |
|----|----------------------------|------------|--------|-----------|--------|
|    |                            | MDEL       | AMEL   | MDEL      | AMEL   |
|    |                            | (µg/L)     | (µg/L) | (µg/L)    | (µg/L) |
| 22 | Chlorobenzene              |            |        |           |        |
| 23 | Chlorodibromomethane       |            |        |           |        |
| 24 | Chloroethane               |            |        |           |        |
| 25 | 2-Chloroethylvinyl Ether   |            |        |           |        |
| 26 | Chloroform                 |            |        |           |        |
| 27 | Dichlorobromomethane       |            |        |           |        |
| 28 | 1,1-Dichloroethane         |            |        |           |        |
| 29 | 1,2-Dichloroethane         |            |        |           |        |
| 30 | 1,1-Dichloroethylene       |            |        |           |        |
| 31 | 1,2-Dichloropropane        |            |        |           |        |
| 32 | 1,3-Dichloropropylene      |            |        |           |        |
| 33 | Ethylbenzene               |            |        |           |        |
| 34 | Methyl Bromide             |            |        |           |        |
| 35 | Methyl Chloride            |            |        |           |        |
| 36 | Methylene Chloride         |            |        |           |        |
| 37 | 1,1,2,2-Tetrachloroethane  |            |        |           |        |
| 38 | Tetrachloroethylene        |            |        |           |        |
| 39 | Toluene                    |            |        |           |        |
| 40 | 1,2-Trans-Dichloroethylene |            |        |           |        |
| 41 | 1,1,1-Trichloroethane      |            |        |           |        |
| 42 | 1,1,2-Trichloroethane      |            |        |           |        |
| 43 | Trichloroethylene          |            |        |           |        |
| 44 | Vinyl Chloride             |            |        |           |        |
| 45 | 2-Chlorophenol             |            |        |           |        |
| 46 | 2,4-Dichlorophenol         |            |        |           |        |
| 47 | 2,4-Dimethylphenol         |            |        |           |        |
| 48 | 2-Methyl-4,6-Dinitrophenol |            |        |           |        |
| 49 | 2,4-Dinitrophenol          |            |        |           |        |
| 50 | 2-Nitrophenol              |            |        |           |        |
| 51 | 4-Nitrophenol              |            |        |           |        |
| 52 | 3-Methyl-4-Chlorophenol    |            |        |           |        |
| 53 | Pentachlorophenol          | **         | **     | 13        | 6.5    |
| 54 | Phenol                     |            |        |           |        |
| 55 | 2,4,6-Trichlorophenol      |            |        |           |        |

|    |                             | Freshwater |        | Saltwater |        |
|----|-----------------------------|------------|--------|-----------|--------|
|    |                             | MDEL       | AMEL   | MDEL      | AMEL   |
|    |                             | (µg/L)     | (µg/L) | (µg/L)    | (µg/L) |
| 56 | Acenaphthene                |            |        |           |        |
| 57 | Acenaphthylene              |            |        |           |        |
| 58 | Anthracene                  |            |        |           |        |
| 59 | Benzidine                   |            |        |           |        |
| 60 | Benzo(a)Anthracene          |            |        |           |        |
| 61 | Benzo(a)Pyrene              |            |        |           |        |
| 62 | Benzo(b)Fluoranthene        |            |        |           |        |
| 63 | Benzo(ghi)Perylene          |            |        |           |        |
| 64 | Benzo(k)Fluoranthene        |            |        |           |        |
| 65 | Bis(2-Chloroethoxy)Methane  |            |        |           |        |
| 66 | Bis(2-Chloroethyl)Ether     |            |        |           |        |
| 67 | Bis(2-Chloroisopropyl)Ether |            |        |           |        |
| 68 | Bis(2-Ethylhexyl)Phthalate  |            |        |           |        |
| 69 | 4-Bromophenyl Phenyl Ether  |            |        |           |        |
| 70 | Butylbenzyl Phthalate       |            |        |           |        |
| 71 | 2-Chloronaphthalene         |            |        |           |        |
| 72 | 4-Chlorophenyl Phenyl Ether |            |        |           |        |
| 73 | Chrysene                    |            |        |           |        |
| 74 | Dibenzo(a,h)Anthracene      |            |        |           |        |
| 75 | 1,2 Dichlorobenzene         |            |        |           |        |
| 76 | 1,3 Dichlorobenzene         |            |        |           |        |
| 77 | 1,4 Dichlorobenzene         |            |        |           |        |
| 78 | 3,3'-Dichlorobenzidine      |            |        |           |        |
| 79 | Diethyl Phthalate           |            |        |           |        |
| 80 | Dimethyl Phthalate          |            |        |           |        |
| 81 | Di-n-Butyl Phthalate        |            |        |           |        |
| 82 | 2,4-Dinitrotoluene          |            |        |           |        |
| 83 | 2,6-Dinitrotoluene          |            |        |           |        |
| 84 | Di-nOctyl Phthalate         |            |        |           |        |
| 85 | 1,2-Diphenylhydrazine       |            |        |           |        |
| 86 | Fluoranthene                |            |        |           |        |
| 87 | Fluorene                    |            |        |           |        |
| 88 | Hexachlorobenzene           |            |        |           |        |
| 89 | Hexachlorobutadiene         |            |        |           |        |

|     |                                  | Freshwater |         | Saltwater |         |
|-----|----------------------------------|------------|---------|-----------|---------|
|     |                                  | MDEL       | AMEL    | MDEL      | AMEL    |
|     |                                  | (µg/L)     | (µg/L)  | (µg/L)    | (µg/L)  |
| 90  | Hexachlorocyclopentadiene        |            |         |           |         |
| 91  | Hexachloroethane                 |            |         |           |         |
| 92  | Inden(1,2,3-cd) Pyrene           |            |         |           |         |
| 93  | Isophorone                       |            |         |           |         |
| 94  | Naphthalene                      |            |         |           |         |
| 95  | Nitrobenzene                     |            |         |           |         |
| 96  | N-Nitrosodimethylamine           |            |         |           |         |
| 97  | N-Nitrosodi-n-Propylamine        |            |         |           |         |
| 98  | N-Nitrosodiphenylamine           |            |         |           |         |
| 99  | Phenanthrene                     |            |         |           |         |
| 100 | Pyrene                           |            |         |           |         |
| 101 | 1,2,4-Trichlorobenzene           |            |         |           |         |
| 102 | Aldrin                           | 3          | 1.5     | 1.3       | 0.65    |
| 103 | alpha-BHC                        |            |         |           |         |
| 104 | beta-BHC                         |            |         |           |         |
| 105 | gamma-BHC                        | 0.95       | 0.47    | 0.16      | 0.08    |
| 106 | delta-BHC                        |            |         |           |         |
| 107 | Chlordane                        | 0.007      | 0.0035  | 0.0066    | 0.0033  |
| 108 | 4,4'-DDT                         | 0.0016     | 0.00082 | 0.0016    | 0.00082 |
| 109 | 4,4'-DDE                         |            |         |           |         |
| 110 | 4,4'-DDD                         |            |         |           |         |
| 111 | Dieldrin                         | 0.092      | 0.046   | 0.0031    | 0.0016  |
| 112 | alpha-Endosulfan                 | 0.092      | 0.046   | 0.014     | 0.0071  |
| 113 | beta-Endosulfan                  | 0.092      | 0.046   | 0.014     | 0.0071  |
| 114 | Endosulfan Sulfate               |            |         |           |         |
| 115 | Endrin                           | 0.059      | 0.029   | 0.0038    | 0.0019  |
| 116 | Endrin Aldehyde                  |            |         |           |         |
| 117 | Heptachlor                       | 0.0062     | 0.0031  | 0.0059    | 0.0029  |
| 118 | Heptachlor Epoxide               | 0.0062     | 0.0031  | 0.0059    | 0.0029  |
| 119 | Polychlorinated biphenyls (PCBs) | 0.023      | 0.011   | 0.049     | 0.025   |
| 120 | "                                |            |         |           |         |
| 121 | "                                |            |         |           |         |
| 122 | "                                |            |         |           |         |

|     |           | Freshwater |         | Saltwater |         |
|-----|-----------|------------|---------|-----------|---------|
|     |           | MDEL       | AMEL    | MDEL      | AMEL    |
|     |           | (µg/L)     | (µg/L)  | (µg/L)    | (µg/L)  |
| 123 | "         |            |         |           |         |
| 124 | "         |            |         |           |         |
| 125 | "         |            |         |           |         |
| 126 | Toxaphene | 0.00033    | 0.00016 | 0.00033   | 0.00016 |

\* Use equations from 40 CFR 131.38(b)(2)

\*\* Use equations from 40 CFR 131.38(b)(1) footnote "f"

#### Mass Limits

All permit limitations, standards or prohibitions shall be expressed in terms of mass except for pH, or other pollutants which cannot appropriately be expressed by mass or under certain circumstances including "when applicable standards and limitations are expressed in terms of other units of measurement." (40 CFR § 122.45(f)(1)). Therefore, all concentration limits stated above except for Settleable Solids, Acute Toxicity, Chronic Toxicity, Total Coliform, Fecal Coliform, pH, and Dissolved Oxygen shall also have a mass limit based on its concentration limit times the discharge flow limit in the Notice of Enrollment expressed in pounds per day (lbs/d) as shown in the equations below:

$$\begin{aligned} \text{Concentration Limit} * \text{Flow Limit} * \text{Conversion Factor} &= \text{Mass Limit} \\ (\text{mg/l}) * (\text{MGD}) * 8.34 [\text{lb} * \text{L} / (\text{Million Gallons} * \text{mg})] &= \text{lbs/day} \\ (\mu\text{g/l}) * (\text{MGD}) * 0.00834 [\text{lb} * \text{L} / (\text{Million Gallons} * \mu\text{g})] &= \text{lbs/day} \\ (\text{mg/l}) * (\text{gpd}) * 0.00000834 [\text{lb} * \text{L} / (\text{Gallons} * \text{mg})] &= \text{lbs/day} \\ (\mu\text{g/l}) * (\text{gpd}) * 0.0000000834 [\text{lb} * \text{L} / (\text{Million Gallons} * \mu\text{g})] &= \text{lbs/day} \end{aligned}$$

5. **Interim Effluent Limitations (Not Applicable)**

6. **Land Discharge Specifications (Not Applicable)**

7. **Reclamation Specifications (Not Applicable)**

B. **Land Discharge Specifications (Not Applicable)**

C. **Reclamation Specifications (Not Applicable)**

## **VI. Receiving Water Limitations**

### **A. Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this WDR. The discharge of groundwater extraction waste from any site shall not, separately or jointly with any other discharge, cause violations of the following water quality objectives. These

limitations apply unless more stringent provisions exist in either the Basin Plan, or an applicable State plan. The more stringent limitation shall apply.

## 1. Bacterial Characteristics

### a. Water-Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water-contact sports, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- (1) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).
- (2) The fecal coliform density based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

### b. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

The median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

## 2. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible.
- b. The discharge of waste shall not cause aesthetically undesirable discoloration of the surface waters.
- c. Natural light shall not be significantly reduced.  
The rate of deposition of solids and the characteristics of inert solids in the sediments shall not be changed such that benthic communities are degraded.

## 3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste materials.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
  - d. The concentration of substances set forth in the Discharge Specifications in marine sediments shall not be increased to levels which would degrade indigenous biota.
  - e. The concentration of organic materials in the sediments shall not be increased to levels which would degrade marine life.
  - f. Nutrient materials shall not cause objectionable aquatic growth or degrade indigenous biota.
4. Biological Characteristics
- a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
  - b. The natural taste, odor, and color of fish, shellfish, or other aquatic resources used for human consumption shall not be altered.
  - c. The concentration of organic materials in fish, shellfish or other aquatic resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
5. Radioactivity
- Discharge of radioactive waste shall not degrade marine life.
6. Toxic Materials Limitations for Marine Waters (Surf Zone) Ocean Plan, 2005

### OBJECTIVES FOR PROTECTION OF MARINE AQUATIC LIFE

| <u>Chemical</u>                      | <u>Units of Measurement</u> | <u>6-Month Median</u> | <u>Daily Maximum</u> | <u>Instantaneous Maximum</u> |
|--------------------------------------|-----------------------------|-----------------------|----------------------|------------------------------|
| Arsenic                              | µg/L                        | 8                     | 32                   | 80                           |
| Cadmium                              | µg/L                        | 1                     | 4                    | 10                           |
| Chromium (Hexavalent)                | µg/L                        | 2                     | 8                    | 20                           |
| Copper                               | µg/L                        | 3                     | 12                   | 30                           |
| Lead                                 | µg/L                        | 2                     | 8                    | 20                           |
| Mercury                              | µg/L                        | 0.04                  | 0.16                 | 0.4                          |
| Nickel                               | µg/L                        | 5                     | 20                   | 50                           |
| Selenium                             | µg/L                        | 15                    | 60                   | 150                          |
| Silver                               | µg/L                        | 0.7                   | 2.8                  | 7                            |
| Zinc                                 | µg/L                        | 20                    | 80                   | 200                          |
| Cyanide                              | µg/L                        | 1                     | 4                    | 10                           |
| Total Chlorine Residual              | µg/L                        | 2                     | 8                    | 60                           |
| Ammonia (as nitrogen)                | µg/L                        | 600                   | 2400                 | 6000                         |
| Chronic Toxicity                     | TUc                         |                       | 1                    |                              |
| Phenolic Compounds (Non-chlorinated) | µg/L                        | 30                    | 120                  | 300                          |
| Chlorinated Phenolics                | µg/L                        | 1                     | 4                    | 10                           |
| Endosulfan                           | ng/L                        | 9                     | 18                   | 27                           |
| Endrin                               | ng/L                        | 2                     | 4                    | 6                            |



| <u>Chemical</u> | Units of<br><u>Measurement</u>   | 6-Month<br><u>Median</u> | Daily<br><u>Maximum</u> | Instantaneous<br><u>Maximum</u> |
|-----------------|--|--------------------------|-------------------------|---------------------------------|
| HCH             | ng/L   | 4                        | 8                       | 12                              |
| Radioactivity   | Not to exceed limits specified in Title 17, Chapter 15, Subchapter 4, Group 3, Article 3, Section 30269 of the California Code of Regulations. |                          |                         |                                 |

## OBJECTIVES FOR PROTECTION OF HUMAN HEALTH -- NONCARCINOGENS

| <u>Chemical</u>              | Units of<br><u>Measurement</u> | <u>30-day Averages</u> |
|------------------------------|--------------------------------|------------------------|
| Acrolein                     | µg/L                           | 220                    |
| Antimony                     | mg/L                           | 1.2                    |
| bis(2-chloroethoxy) methane  | µg/L                           | 4.4                    |
| bis(2-chloroisopropyl) ether | mg/L                           | 1.2                    |
| Chlorobenzene                | µg/L                           | 570                    |
| Chromium (III)               | mg/L                           | 190                    |
| Di-n-butyl phthalate         | mg/L                           | 3.5                    |
| Dichlorobenzenes             | mg/L                           | 5.1                    |
| 1,1-dichloroethylene         | mg/L                           | 7.1                    |
| Diethyl phthalate            | mg/L                           | 33                     |
| Dimethyl phthalate           | mg/L                           | 820                    |
| 4,6-dinitro-2-methylphenol   | µg/L                           | 220                    |
| 2,4-dinitrophenol            | µg/L                           | 4.0                    |
| Ethylbenzene                 | mg/L                           | 4.1                    |
| Fluoranthene                 | µg/L                           | 15                     |
| Hexachlorocyclopentadiene    | µg/L                           | 58                     |
| Isophorone                   | mg/L                           | 150                    |
| Nitrobenzene                 | µg/L                           | 4.9                    |
| Thallium                     | µg/L                           | 14                     |
| Toluene                      | mg/L                           | 85                     |
| 1,1,2,2-tetrachloroethane    | mg/L                           | 1.2                    |
| Tributyltin                  | ng/L                           | 1.4                    |
| 1,1,1-trichloroethane        | mg/L                           | 540                    |
| 1,1,2-trichloroethane        | mg/L                           | 43                     |

## OBJECTIVES FOR PROTECTION OF HUMAN HEALTH -- CARCINOGENS

| <u>Chemical</u>             | Units of<br><u>Measurement</u> | <u>30-day Average</u> |
|-----------------------------|--------------------------------|-----------------------|
| Acrylonitrile               | µg/L                           | 0.1                   |
| Aldrin                      | ng/L                           | 0.022                 |
| Benzene                     | µg/L                           | 5.9                   |
| Benzidine                   | ng/L                           | 0.069                 |
| Beryllium                   | ng/L                           | 33                    |
| bis(2-chloroethyl) ether    | µg/L                           | 0.045                 |
| bis(2-ethylhexyl) phthalate | µg/L                           | 3.5                   |
| Carbon tetrachloride        | µg/L                           | 0.9                   |
| Chlordane                   | ng/L                           | 0.023                 |
| Chloroform                  | mg/L                           | 0.13                  |
| DDT                         | ng/L                           | 0.17                  |

| <u>Chemical</u>        | <u>Units of<br/>Measurement</u> | <u>30-day Average</u> |
|------------------------|---------------------------------|-----------------------|
| 1,4-dichlorobenzene    | µg/L                            | 18                    |
| 3,3-dichlorobenzidine  | ng/L                            | 8.1                   |
| 1,2-dichloroethane     | mg/L                            | 0.13                  |
| Dichloromethane        | mg/L                            | 0.45                  |
| 1,3-dichloropropene    | µg/L                            | 8.9                   |
| Dieldrin               | ng/L                            | 0.04                  |
| 2,4-dinitrotoluene     | µg/L                            | 2.6                   |
| 1,2-diphenylhydrazine  | µg/L                            | 0.16                  |
| Halomethanes           | mg/L                            | 0.13                  |
| Heptachlor             | ng/L                            | 0.72                  |
| Hexachlorobenzene      | ng/L                            | 0.21                  |
| Hexachlorobutadiene    | µg/L                            | 14                    |
| Hexachloroethane       | µg/L                            | 2.5                   |
| N-nitrosodimethylamine | µg/L                            | 7.3                   |
| N-nitrosodiphenylamine | µg/L                            | 2.5                   |
| PAHs                   | ng/L                            | 8.8                   |
| PCBs                   | ng/L                            | 0.019                 |
| TCDD equivalents       | pg/L                            | 0.0039                |
| Tetrachloroethylene    | µg/L                            | 99                    |
| Toxaphene              | ng/L                            | 0.21                  |
| Trichloroethylene      | µg/L                            | 27                    |
| 2,4,6-trichlorophenol  | µg/L                            | 0.29                  |
| Vinyl chloride         | µg/L                            | 36                    |

7. Toxic Materials Limitations and Objectives for Inland Surface Waters  
(Fresh)

- (a) Discharges of extracted groundwater shall not cause violations of surface water quality objectives presented by hydrographic subunit and subarea in Table 3-2 of the Comprehensive Water Quality Control Plan Report, San Diego Basin (9), as amended.
- (b) Discharges of extracted groundwater shall not cause violations of the following objectives in inland surface waters:
  1. No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
  2. For the protection of public health and aquatic species, waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of toxics in excess of the maximum contaminant levels for contaminants set forth in the California Code of Regulations, Title 22, as amended, or water quality objectives listed in 40 CFR 131.38 (Attachment D), for the protection of aquatic species and protection of human health, whichever concentration for a specific chemical is less. Current maximum

contaminant levels for the protection of human health from the ingestion of water are as follows:

| <u>Constituent</u>    | <u>Title22 Maximum<br/>Contaminant Level (mg/L)</u> |
|-----------------------|---|
| a. Inorganic Aluminum | 1   |
| Arsenic               | 0.05  |
| Barium                | 1   |
| Cadmium               | 0.01  |
| Chromium              | 0.05  |
| Lead                  | 0.05  |
| Mercury               | 0.002   |
| Nitrate               | 45  |
| Selenium              | 0.01  |
| Silver                | 0.05  |

| <u>Constituent</u>                 | <u>Title22 Maximum<br/>Contaminant Level (mg/L)</u> |
|------------------------------------|---|
| b. Organic Atrazine                | 0.003   |
| Bentazon                           | 0.018   |
| Benzene                            | 0.001   |
| Carbon Tetrachloride               | 0.0005  |
| 2,4-D                              | 0.1   |
| Dibromochloropropane               | 0.0002  |
| 1,4-Dichlorobenzene                | 0.005   |
| 1,2-Dichloroethane                 | 0.0005  |
| 1,1-Dichloroethylene               | 0.006   |
| 1,3-Dichloropropene                | 0.0005  |
| Endrin                             | 0.0002  |
| Ethyl Benzene                      | 0.68  |
| Ethylene Dibromide                 | 0.00002   |
| Lindane                            | 0.004   |
| Methoxychlor                       | 0.1   |
| Molinate                           | 0.02  |
| Monochlorobenzene                  | 0.03  |
| Simazine                           | 0.01  |
| 1,1,2,2-Tetrachloroethane          | 0.001   |
| Tetrachloroethylene                | 0.005   |
| Thiobencarb                        | 0.07  |
| Toxaphene                          | 0.005   |
| 2,4,5-TP Silvex                    | 0.01  |
| 1,1,1-Trichloroethane              | 0.2   |
| 1,1,2-Trichloroethane              | 0.032   |
| Trichloroethylene                  | 0.005   |
| Vinyl Chloride                     | 0.0005  |
| Xylenes (Single or sum of isomers) | 1.75  |

8. Mineral Objectives for Inland Surface Waters (fresh):

| Hydrographic Unit         | Objective (mg/L) |                 |                |              |
|---------------------------|------------------|-----------------|----------------|--------------|
|                           | <u>TDS</u>       | <u>Chloride</u> | <u>Sulfate</u> | <u>Boron</u> |
| San Juan Unit             |                  |                 |                |              |
| 1.10                      | 1000             | 400             | 500            | 0.75         |
| 1.20,1.30,1.40,1.50       | 500              | 250             | 250            | 0.75         |
| Santa Margarita Unit      |                  |                 |                |              |
| 2.20,2.40,2.50,2.60       | 500              | 250             | 250            | 0.75         |
| 2.70,2.80,2.90,2.10,2.30  | 750              | 300             | 300            | 0.75         |
| San Luis Rey Unit         |                  |                 |                |              |
| 3.10,3.20,3.30            | 500              | 250             | 250            | 0.75         |
| Carlsbad Unit             |                  |                 |                |              |
| 4.10,4.40                 |                  |                 |                |              |
| 4.20,4.30,4.50,4.60       | 500              | 250             | 250            | 0.75         |
| San Dieguito Unit         |                  |                 |                |              |
| 5.10,5.20,5.30,5.40, 5.50 | 500              | 250             | 250            | 0.75         |
| Penasquitos Unit          |                  |                 |                |              |
| 6.10,6.20,6.40            | 500              | 250             | 250            | 0.75         |
| 6.30,6.50                 | ---              | ---             | ---            | ---          |
| San Diego Unit            |                  |                 |                |              |
| 7.10                      | 1000             | 400             | 500            | 1.0          |
| 7.11                      | 1500             | 400             | 500            | 1.0          |
| 7.12c/d,                  | 1000/1500        | 400             | 500            | 1.0          |
| 7.20,7.30,7.40            | 300              | 50              | 65             | 1.0          |
| Coronado Unit             |                  |                 |                |              |
| 10.10                     | NA               | NA              | NA             | NA           |
| Sweetwater River Unit     |                  |                 |                |              |
| 9.10                      | 1500             | 500             | 500            | 0.75         |
| 9.20,9.30                 | 500              | 250             | 250            | 0.75         |
| Otay Unit                 |                  |                 |                |              |
| 10.20                     | 1000             | 400             | 500            | 0.75         |
| 10.30                     | 500              | 250             | 250            | 0.75         |
| Tijuana Unit              |                  |                 |                |              |
| 11.11                     | 2100             | NA              | NA             | NA           |
| 11.20,11.30,11.40,11.50   |                  |                 |                |              |
| 11.60,11.70,11.80         | 500              | 250             | 250            | 1.0          |

9. Waters designated for use as agricultural supply (AGR) shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial use.

10. Radioactivity: Discharges of radioactive waste shall not degrade marine life.

## **B. Groundwater Limitations (Not Applicable)**

## **VII. Provisions**

### **A. Standard Provisions**

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this WDR.
2. Regional Board Standard Provisions. The Discharger shall comply with the following provisions:
  - a. The Discharger shall comply with all requirements and conditions of this WDR. Any permit non-compliance constitutes a violation of the CWA and/or of the CWC and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of an application for permit renewal, modification, or reissuance.
  - b. The Discharger shall comply with all applicable federal, state, and local laws and regulations for handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner which causes or threatens to cause a condition of pollution, contamination or nuisance as those terms are defined in CWC 13050.
  - c. The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the CWA.
  - d. Any noncompliance with this WDR is a violation of the CWC and/or the CWA and is grounds for denial of an application for Order renewal or modification.
  - e. No discharge of waste into waters of the state, whether or not the discharge is made pursuant to WDRs, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.
  - f. For the purposes of this WDR, the term "permittee" used in parts of 40 CFR incorporated into this WDR by reference and/or applicable to this WDR shall have the same meaning as the term "Discharger" used elsewhere in this WDR.

- g. This WDR expires on March 12, 2013, after which, the terms and conditions of this permit are automatically continued pending issuance of a new WDR, provided that all requirements of USEPA's NPDES regulations at 40 CFR 122.6 and the State's regulations at CCR Title 23, Section 2235.4 regarding the continuation of expired Orders and waste discharge requirements are met.
- h. Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this permit will be considered confidential, and all such information and documents shall be available for review by the public at the office of the Regional Water Board.
- i. A copy of this WDR shall be maintained on-site at the Facility, and shall be available to Regional Water Board, State Water Board, and EPA personnel and/or their authorized representatives at all times.
- j. The Discharger shall comply with any interim limitations established by addendum, enforcement action, or revised waste discharge requirements that have been or may be adopted by the Regional Water Board.
- k. Failure to comply with provisions or requirements of this WDR, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- l. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, discharge specification, or receiving water limitation of this WDR, the Discharger shall notify the Regional Water Board by telephone (858) 467-2952 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.
- m. The Discharger is required to retain records, including all monitoring information and copies of all reports required by this WDR, for five years unless directed otherwise by the Regional Board.
- n. This WDR may be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, receipt of USEPA

guidance concerning regulated activities, judicial decision, or in accordance with 40 Code of Federal Regulations (CFR) 122.62, 122.63, 122.64, and 124.5.

- o. Dischargers enrolled in this WDR planning to discharge extracted groundwater waste after the expiration date of March 12, 2013 may be subject to new prohibitions or requirements based on the re-issuance of this WDR after March 12, 2013.
- p. The enrollee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this WDR and the Notice of Enrollment from the Regional Board, including such accelerated or additional monitoring as may be necessary to determine the nature, and effect of the noncomplying discharge.
- q. This WDR or the Notice of Enrollment from the Regional Board, may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
  - (1) Violation of any terms or conditions of this WDR or the Notice of Enrollment from the Regional Board;
  - (2) Obtaining enrollment in this WDR, or a Notice of Enrollment from the Regional Board, by misrepresentation or failure to disclose fully all relevant facts;
  - (3) A change in any condition that requires either a temporary or permanent reduction or elimination of the discharge subject to waste discharge requirements; or
  - (4) A finding that monitoring "indicator" pollutants listed in this WDR do not ensure compliance with water quality criteria or objectives for the pollutants expected to be represented by the "indicator" pollutants.
- r. The filing of a request by the enrollee for modification, revocation and reissuance, or termination of this WDR or an associated discharge Notice of Enrollment from the Regional Board, or a notification of planned change in or anticipated noncompliance with this WDR or discharge Notice of Enrollment does not stay any condition of this WDR or the Notice of Enrollment from the Regional Board.

- s. Notwithstanding Provision 2.e above, if any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this WDR, the Regional Board may institute proceedings under these regulations to modify or revoke and reissue this WDR to conform to the toxic effluent standard or prohibition.
- t. In addition to any other grounds specified herein, this WDR or a Notice of Enrollment from the Regional Board shall be modified or revoked at any time if, on the basis of any data, the Regional Board determines that continued discharges may cause unreasonable degradation of the aquatic environment.
- u. The Regional Board or the Director of the USEPA may require any person requesting enrollment under this WDR or subject to waste discharge requirements under this WDR to apply for and obtain an individual NPDES permit. Cases where an individual NPDES permit may be required include but are not limited to those described in 40 CFR 122.28 (b)(3)(i) and (b)(3)(ii), and where the volume of a discharge exceeds 10 million gallons per year, or the duration of a discharge exceeds 3 years.
- v. It shall not be a defense for the enrollee in an enforcement action that effluent limitation violations are a result of analytical variability rendering the results inaccurate. The validity of the testing results, whether or not the enrollee has monitored or sampled more frequently than required by this WDR, shall not be a defense to an enforcement action.
- w. A copy of this WDR, and the Notice of Enrollment from the Regional Board shall be posted at a prominent location at or near the enrollee's facility, and shall be available to operating personnel at all times.
- x. The enrollee shall take all reasonable steps to minimize or prevent any discharge in violation of this WDR which has a reasonable likelihood of adversely affecting human health or the environment.
- y. For the purposes of this WDR, the term permit, general permit, and order, shall have the same meaning as the term WDR used elsewhere in this WDR.
- z. For the purpose of this WDR, the term Discharger and enrollee shall have the same meaning as the term discharger used elsewhere in this WDR.

## **B. Monitoring and Reporting Program Requirements**

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this WDR.



### **C. Special Provisions**

1. Reopener Provisions (Not Applicable)
2. Special Studies, Technical Reports and Additional Monitoring Requirements (Not Applicable)
3. Best Management Practices and Pollution Prevention Plan (Not Applicable)
4. Compliance Schedules (Not Applicable)
5. Construction, Operation and Maintenance Specifications (Not Applicable)
6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)
7. Other Special Provisions

The Dischargers shall dispose of solids removed from liquid wastes in a manner that is consistent with Title 27 of the CCR and approved by the Regional Board.

8. Order No. R9-2008-0002 may be modified by the Regional Board and EPA to enable the discharger to participate in comprehensive regional monitoring activities conducted in the Southern California Bight during the term of this permit. The intent of regional monitoring activities is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled scientific resources of the region. During these coordinated sampling efforts, the discharger's sampling and analytical effort may be reallocated to provide a regional assessment of the impact of the discharge of municipal wastewater to the Southern California Bight. Anticipated modifications to the monitoring program will be coordinated so as to provide a more comprehensive picture of the ecological and statistical significance of monitoring results and to determine cumulative impacts of various pollution sources. If predictable relationships among the biological, water quality and effluent monitoring variables can be demonstrated, it may be appropriate to decrease the discharger's sampling effort. Conversely, the monitoring program may be intensified if it appears that the objectives cannot be achieved through the discharger's existing monitoring program. These changes will improve the overall effectiveness of monitoring in the Southern California Bight. Minor changes may be made without further public notice.

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### **VIII. Compliance Determination**

Compliance with the effluent limitations contained in Section IV of this WDR will be determined as specified below:

**A. Average Monthly Effluent Limitation (AMEL)**

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**B. Average Weekly Effluent Limitation (AWEL)**

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in seven days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**C. Maximum Daily Effluent Limitation (MDEL)**

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period. For any one day during which no sample is taken, no compliance determination can be made for that day.

**D. Instantaneous Minimum Effluent Limitation**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

**E. Instantaneous Maximum Effluent Limitation**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately

(e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

#### **F. Six-Month Median Effluent Limitation**

The Discharger shall determine the six-month median effluent value (SMEV) for a given parameter by calculating the statistical median of all daily effluent values (DEVs) for each parameter within each six-month calendar period (January-June and July-December). The SMEV determination for a given six-month calendar period shall not include DEVs from any other six-month calendar period. If only a single DEV is obtained for a parameter during a six-month calendar period, that DEV shall be considered the SMEV for that parameter for that given six-month calendar period. The SMEV shall be attributed to each day of the six-month calendar period for determination of compliance with the six-month median effluent limitation (SMEL) for a given parameter for each day of that given six-month calendar period, resulting in approximately 180 days of non-compliance depending on the number of days in the six-month calendar period. If the SMEV exceeds the six-month median, the Discharger will be considered out of compliance for each day for the six-month period. The SMEV cannot be determined for any six month calendar period during which no DEV is obtained.

## Attachment A – Definitions

**Arithmetic Mean ( $\mu$ ),** also called the average: the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \mu = \Sigma x / n \quad \text{where: } \Sigma x \text{ is the sum of the measured ambient water concentrations, and } n \text{ is the number of samples.}$$

**Average Monthly Effluent Limitation (AMEL):** the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Bioaccumulative Pollutants:** those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

**Carcinogenic Pollutants:** substances that are known to cause cancer in living organisms.

**Coefficient of Variation (CV):** a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

**Cone of Depression:** A depression in the water table that develops around a pumped well.

**Cone of Influence:** The depression, roughly conical in shape, produced in a water table by the pumping of water from a well.

**Contamination Site:** A site that is currently under investigation or cleanup for any medium (air, soil, water), or is provided oversight by any local, state, or federal environmental regulatory agency, such as the County of San Diego, Air Pollution Control District, and Department of Toxics Substance Control, or the quality of surface water or groundwater at a site has been altered by wastes to a degree which unreasonably affects either the waters for beneficial uses or facilities which serve these beneficial uses.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12 a.m. through 11:59 p.m.) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or;

(2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day, or other 24-hour period defined as a day), or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if one day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

**Detected, but Not Quantified (DNQ):** those sample results less than the Reporting Level (RL), but greater than or equal to the laboratory's Method Detection Limit (MDL).

**Dilution Credit:** the amount of dilution granted to a Discharger in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio, or determined through conducting a mixing zone study, or modeling of the discharge and receiving water.

**Effluent Concentration Allowance (ECA):** a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Enclosed Bays:** indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

**Notice of Enrollment:** A notice from the Regional Board to the discharger that the NOI application has been accepted and the project is enrolled in this WDR. The Notice of Enrollment will specify the discharge flow limit, any additional or increase in monitoring due to specific circumstances of the discharge, or other requirements.

**Estimated Chemical Concentration:** the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the Minimum Level value.

**Estuaries:** waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

**Inland Surface Waters:** all surface waters of the State that do not include the ocean, enclosed bays, or estuaries. Inland surface water consist of freshwater and do not have any measurable salinity.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

**Maximum Daily Effluent Limitation (MDEL):** the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

**Median:** the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

**Method Detection Limit (MDL):** the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

**Minimum Level (ML):** the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

**Mixing Zone:** a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

**Not Detected (ND):** those sample results less than the laboratory's MDL.

**Notice of Intent (NOI):** A form completed and signed by a Discharger notifying the Regional Board that the Discharger is applying for enrollment under the terms and conditions of the WDR and will comply with the WDR for a groundwater extraction activity at a specific site.

**Notice of Termination (NOT):** A letter completed and signed by a Discharger notifying the Regional Board that the Discharger no longer wishes to discharge under the WDR. Submission of a NOT constitutes notice that the owner (and his/her agent) of the site identified on the letter has ceased discharge groundwater associated with groundwater extraction activities at the site under this WDR.

**Ocean Waters:** the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Board's California Ocean Plan.

**Permanent groundwater extraction activities:** Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s).

**Persistent pollutants:** substances for which degradation or decomposition in the environment is nonexistent or very slow.

**Radius of Influence:** The radial distance from the center of a wellbore to the point where there is no lowering of the water table or potentiometric surface (the edge of the cone of depression).

**Reporting Level (RL):** the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this WDR. The MLs included in this WDR correspond to approved analytical methods for reporting a sample result that are selected by the Regional Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP, or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

**Satellite Collection System:** the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

**Six-Month Median Effluent Limitation:** the highest allowable median of all daily discharges, based on 24-hour flow-weighted composite samples, for any 180-day period.

**Source of Drinking Water:** any water designated as municipal or domestic supply (MUN) in a Regional Board Basin Plan.

**Standard Deviation ( $\sigma$ ):** a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

$\mu$  is the arithmetic mean of the observed values; and

n is the number of samples.

**Temporary Discharge:** Discharge of extracted groundwater waste from groundwater cleanup with a projected cleanup date and subsurface excavation that requires groundwater extraction that is not a permanent groundwater extraction activity.

Discharges of groundwater for the purpose of protecting subterranean structures from groundwater infiltration are not considered groundwater cleanup projects, whether or not such discharges cleanup or remove pollutants from the groundwater. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water (CAG990002).

**Toxicity Reduction Evaluation (TRE):** a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical[s] responsible for toxicity. These procedures are performed in three phases [characterization, identification, and confirmation] using aquatic organism toxicity tests.)

**Waters of the United States or waters of the U.S.:** (40 e-CFR 122.2, March 20, 2007) (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:



(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial sea; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Attachment B1 – Notice of Intent Form

## NOTICE OF INTENT

TO DISCHARGE GROUNDWATER EXTRACTION WASTE  
TO SURFACE WATERS WITHIN THE SAN DIEGO REGION

EXCEPT FOR SAN DIEGO BAY

SUBJECT TO GENERAL WASTE DISCHARGE REQUIREMENTS IN  
ORDER NO. R9-2008-0002 (NPDES NO. CAG919002)

GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM  
GROUNDWATER EXTRACTION AND SIMILAR WASTE DISCHARGES TO SURFACE  
WATERS WITHIN THE SAN DIEGO REGION EXCEPT FOR SAN DIEGO BAY (WDR)

Attach Form 200 (completed and signed) and additional sheets as necessary to provide  
complete information requested in this Notice of Intent (NOI).

### I. STIPULATION OF APPLICABILITY AND CERTIFICATION

- ☐ I have determined that the groundwater extracted waste discharge will be to navigable waters of the United States within the San Diego Region and that any violation of effluent limits will be subject to Mandatory Minimum Penalties under California Water Code section 13385(h) and (i).
- ☐ I have determined that this discharge is eligible for enrollment in this General "Waste Discharge Requirements" (WDR) because the discharge will comply with the Discharge Specifications of this WDR.
- ☐ I have read this WDR Order No. R9-2008-0002 and hereby certify that:
  - 1. I understand the requirements of Order No. R9-2008-0002.
  - 2. The enclosed information describing my proposed groundwater extraction waste discharge is accurate and describes a discharge that meets the requirements of Order No. R9-2008-0002, which is the applicable general groundwater extraction waste discharge permit.
  - 3. I will comply with all terms, conditions, and requirements of WDR Order No. R9-2008-0002.

## I. STIPULATION OF APPLICABILITY AND CERTIFICATION

I certify under penalty of law that this document, Form 200, and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the criteria for eligibility will be complied with.

A. Printed Name:

B. Signature\*:

C. Date:

D. Title:

\*The appropriate person must sign the application form.

Acceptable signatures are:

1. for a corporation, a principal executive officer of at least the level of senior vice-president;
2. for a partnership or individual (sole proprietorship), a general partner or the proprietor;
3. for a governmental or public agency, either a principal executive officer or ranking elected/appointed official.

## II. ITEMS REQUIRED FOR DETERMINING ELIGIBILITY

- ☐ A. Identify and discuss technical and economic feasibility of alternative disposal options.
- ☐ B. If discharging to an MS4, obtain authorization from the appropriate municipality and submit proof.
- ☐ C. Submit scale appropriate vicinity map(s).
- ☐ D. Submit a completed and signed Form 200 (*Application/Report of Waste Discharge, General Information for Waste Discharge Requirements or NPDES Permit*).

### III. NOTICE OF INTENT STATUS

A. Is this a renewal of an expiring WDR? 1. ☐ No 2. ☐ Yes, Order No.: \_\_\_\_\_

### IV. GROUNDWATER EXTRACTION INFORMATION

A. Nature of Groundwater Extraction Activity:

1. ☐ Subsurface Excavation  
a. ☐ Foundation b. ☐ Tunneling c. ☐ Construction d. ☐ Footing e. ☐ Other \_\_\_\_\_
2. ☐ Remediation Project
3. ☐ Other \_\_\_\_\_

B. ☐ This project is associated with a project that requires Regional Board license, permit, or oversight?  
Explain: Construction storm water, 401 Certifications, WDR, UST or cleanup project, etc.

C. Duration and Start Date

1. Proposed Start Date of Groundwater Extraction Discharge: \_\_\_\_\_
2. Estimated Duration of Groundwater Extraction Discharge: \_\_\_\_\_

D. 1. ☐ Describe the historical use of the land within the cone/radius of influence.

2. ☐ Identify all known contamination sites and ground water plumes within half mile of each groundwater extraction point to be used in the project.  
Attach a source of contamination description and list of constituents.  
Attach site assessment (if one has been done)

E. For each discharge point identify the location of discharge according to the following: (show in vicinity map)

1. ☐ Storm Drain, ☐ Attach proof of authorization from the appropriate municipality for the discharge into the storm drain or conveyance used to convey the discharge.
2. ☐ Directly into surface water, ☐ submerged or ☐ on the surface
3. Salinity of the Tributary at the discharge point \_\_\_\_\_

F. Will treatment be required to meet the Discharge Specifications of this WDR?

1. ☐ Yes 2. ☐ No
- If Yes, attach the following:
- a. ☐ A report certifying the adequacy of each component of the treatment facilities or other type of contingency plan. The report shall also certify that:
- (1) ☐ all treatment facility startup and operation instruction manuals are adequate and available to operating personnel,
  - (2) ☐ adequate treatment facility maintenance and testing (if treatment facilities are on "standby") schedules are included in the treatment facility operations manual,
  - (3) ☐ treatment facilities and appurtenances can be fully operational, as designed, within 24 hours, and
  - (4) ☐ influent and effluent sampling locations or ports are located in areas where samples representative of the waste stream to be monitored can be obtained.
- b. ☐ The design engineer shall affix his/her signature and engineering license number to this certification report.

#### IV. GROUNDWATER EXTRACTION INFORMATION

G. Additional Attachments

1. ☐ Describe best management practices (bmp) and contingency plan.
2. ☐ Provide the results of the analysis of the groundwater to be extracted for all of those constituents, as determined by the sampling requirement criteria described in this WDR, for the proposed receiving water type.

#### V. RECEIVING WATER INFORMATION

A. Name of receiving water(s): (San Diego River, Rainbow Creek, Pacific Ocean, etc.)

B. Describe the types of receiving waters affected: (bay, creek, river, etc.)

C. Receiving water flows seasonally 1. ☐ Yes 2. ☐ No

D. More than one discharge point is proposed?

1. ☐ Yes 2. ☐ No If Yes, how many? \_\_\_\_\_

And distance between points \_\_\_\_\_

Include in Vicinity Map

3. Location of Discharge Points: (attach)  
Example: Outfall 001 (Latitude and Longitude)

E. Proposed Flow (MGD or gpd) of the discharge:

1. Maximum Discharge: \_\_\_\_\_

2. Average Daily Flowrate: \_\_\_\_\_

3. Basis for flow rate estimates (if necessary attach):

F. Hydrologic Subarea Number(s) at the point of discharge:

## VI. APPLICATION FEE

The initial fee and annual fee are based upon the type of pollutants to be discharged or potentially discharged.

Make checks payable to "SWRCB" and include the project's name in the "memo" field.

☐ **Category 3 Lowest Threat to Water Quality**

The discharge will not require any treatment.

Current fee is \$1,000 plus \$185 surcharge = \$1,185

☐ **Category 2 Moderate Threat to Water Quality**

The discharge will be from a well that has a contaminated site within the radius of influence.

Current fee is \$2,900 plus \$537 surcharge = \$3,437

☐ **Category 1 Highest Threat to Water Quality**

The discharge will require treatment to meet effluent limitations.

Current fee is \$4,800 plus \$888 surcharge = \$5,688

## VII. ANTIDEGREDATION POLICIES

- A. ☐ Statement of compliance with 40 CFR 131.12 and State Water Resources Control Board Resolution No. 68-16 (attach) (collectively antidegradation policies)

### 40 CFR 131.12 Antidegradation policy.

(a) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

- (1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
- (2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.
- (3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.
- (4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.

### RESOLUTION NO. 68-16

#### STATEMENT OF POLICY WITH RESPECT TO MAINTAINING HIGH QUALITY OF WATERS IN CALIFORNIA

WHEREAS the California Legislature has declared that it is the policy of the State that the granting of permits and licenses for unappropriated water and the disposal of wastes into the waters of the State shall be so regulated as to achieve highest water quality consistent with maximum benefit to the people of the State and shall be controlled so as to promote the peace, health, safety and welfare of the people of the State; and

WHEREAS water quality control policies have been and are being adopted for waters of the State; and

WHEREAS the quality of some waters of the State is higher than that established by the adopted policies and it is the intent and purpose of this Board that such higher quality shall be maintained to the maximum extent possible consistent with the declaration of the Legislature;

#### NOW, THEREFORE, BE IT RESOLVED:

1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.
2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur, and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.
3. In implementing this policy, the Secretary of the Interior will be kept advised and will be provided with such information as he will need to discharge his responsibilities under the Federal Water Pollution Control Act.

BE IT FURTHER RESOLVED that a copy of this resolution be forwarded to the Secretary of the Interior as part of California's water quality control policy submission.

#### CERTIFICATION

The undersigned, Executive Officer of the State Water Resources Control Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on October 24, 1968.

Dated: October 28, 1968

Kerry W. Mulligan, Executive Officer  
State Water Resources Control Board

### VIII. CALIFORNIA CONSTITUTION COMPLIANCE

- A. ☐ Discuss the potential uses of the extracted groundwaters, efforts made to ensure use to the fullest extent possible and compliance with Article 10, Section 2 of the California Constitution (attach)

#### CALIFORNIA CONSTITUTION

##### ARTICLE 10 WATER

SEC. 2. It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water. Riparian rights in a stream or water course attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purposes for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses; provided, however, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of water of the stream to which the owner's land is riparian under reasonable methods of diversion and use, or as depriving any appropriator of water to which the appropriator is lawfully entitled.

This section shall be self-executing, and the Legislature may also enact laws in the furtherance of the policy in this section contained.

Submit the NOI, first annual fee, map, and other attachments to the following address:

CRWQCB – San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

Attn: Groundwater Extraction to San Diego Region  
Core Regulatory Unit  
NOTICE OF INTENT



**IX. STATE USE ONLY**

|                     |                         |   |
|---------------------|-------------------------|---|
| WDID:               | Staff Initials:         | Status: <input type="checkbox"/> Complete<br><input type="checkbox"/> Incomplete<br><input type="checkbox"/> Withdrawn<br><input type="checkbox"/> Pending Additional Information |
| Date NOI Received:  | Check #:                |   |
| Date NOI Processed: | Fee Amount Received: \$ |   |
| CIWQS Place # :     | CIWQS Reg. Meas. # :    |   |
| Comments:           |                         |   |
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|                     |                         |   |
|                     |                         |   |

Attachment B2 – Priority Toxic Pollutants

Source: [65 FR 31711, May 18, 2000, as amended at 66 FR 9961, Feb. 13, 2001; 68 FR 62747, Nov. 6, 2003]

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
Numeric criteria for priority toxic pollutants for the State of California

| A                              |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|--------------------------------|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                     | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>c</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>c</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>c</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>c</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 1. Antimony                    | 7440360       |  |   |  |   | 14 a,s  | 4300 a,t                          |
| 2. Arsenic <sup>b</sup>        | 7440382       | 340 i,m,w  | 150 i,m,w   | 69 i,m   | 36 i,m  |   |                                   |
| 3. Beryllium                   | 7440417       |  |   |  |   | n   | n                                 |
| 4. Cadmium <sup>b</sup>        | 7440439       | 4.3 e,i,m,w,x                                    | 2.2 e,i,m,w   | 42 i,m   | 9.3 i,m   | n   | n                                 |
| 5a. Chromium (III)             | 16065831      | 550 e,i,m,o                                      | 180 e,i,m,o   |  |   | n   | n                                 |
| 5b. Chromium (VI) <sup>b</sup> | 18540299      | 16 i,m,w   | 11 i,m,w  | 1100 i,m   | 50 i,m  | n   | n                                 |
| 6. Copper <sup>b</sup>         | 7440508       | 13 e,i,m,w,x                                     | 9.0 e,i,m,w   | 4.8 i,m  | 3.1 i,m   | 1300  |                                   |
| 7. Lead <sup>a</sup>           | 7439921       | 65 e,i,m   | 2.5 e,i,m   | 210 i,m  | 8.1 i,m   | n   | n                                 |
| 8. Mercury <sup>b</sup>        | 7439976       | [Reserved]                                       | [Reserved]  | [Reserved]                                       | [Reserved]  | 0.050 a   | 0.051 a                           |
| 9. Nickel <sup>b</sup>         | 7440020       | 470 e,i,m,w                                      | 52 e,i,m,w  | 74 i,m   | 8.2 i,m   | 610 a   | 4600 a                            |
| 10. Selenium <sup>b</sup>      | 7782492       | [Reserved] p                                     | 5.0 q   | 280 i,m  | 71 i,m  | n   | n                                 |
| 11. Silver <sup>a</sup>        | 7440224       | 3.4 e,i,m  |   | 1.9 i,m  |   |   |                                   |
| 12. Thallium                   | 7440280       |  |   |  |   | 1.7 a,s   | 6.3 a,t                           |
| 13. Zinc <sup>b</sup>          | 7440666       | 120<br>e,i,m,w,x                                 | 120 e,i,m,w   | 90 i,m   | 81 i,m  |   |                                   |
| 14. Cyanide <sup>a</sup>       | 57125         | 22 o   | 5.2 o   | 1 r  | 1 r   | 700 a   | 220,000 a,j                       |
| 15. Asbestos                   | 1332214       |  |   |  |   | 7,000,000<br>fibers/L k,s   |                                   |
| 16. 2,3,7,8-TCDD (Dioxin)      | 1746016       |  |   |  |   | 0.00000013<br>c   | 0.00000014<br>c                   |
| 17. Acrolein                   | 107028        |  |   |  |   | 320 s   | 780 t                             |
| 18. Acrylonitrile              | 107131        |  |   |  |   | 0.059 a,c,s   | 0.66 a,c,t                        |
| 19. Benzene                    | 71432         |  |   |  |   | 1.2 a,c   | 71 a,c                            |
| 20. Bromoform                  | 75252         |  |   |  |   | 4.3 a,c   | 360 a,c                           |
| 21. Carbon Tetrachloride       | 56235         |  |   |  |   | 0.25 a,c,s  | 4.4 a,c,t                         |
| 22. Chlorobenzene              | 108907        |  |   |  |   | 680 a,s   | 21,000 a,j,t                      |
| 23. Chlorodibromomethane       | 124481        |  |   |  |   | 0.401 a,c   | 34 a,c                            |
| 24. Chloroethane               | 75003         |  |   |  |   |   |                                   |
| 25. 2-Chloroethylvinyl Ether   | 110758        |  |   |  |   |   |                                   |

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
Numeric criteria for priority toxic pollutants for the State of California

| A                              |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|--------------------------------|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                     | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 26. Chloroform                 | 67663         |  |   |  |   | [Reserved]  | [Reserved]                        |
| 27. Dichlorobromomethane       | 75274         |  |   |  |   | 0.56 a,c  | 46 a,c                            |
| 28. 1,1-Dichloroethane         | 75343         |  |   |  |   |   |                                   |
| 29. 1,2-Dichloroethane         | 107062        |  |   |  |   | 0.38 a,c,s  | 99 a,c,t                          |
| 30. 1,1-Dichloroethylene       | 75354         |  |   |  |   | 0.057 a,c,s   | 3.2 a,c,t                         |
| 31. 1,2-Dichloropropane        | 78875         |  |   |  |   | 0.52 a  | 39 a                              |
| 32. 1,3-Dichloropropylene      | 542756        |  |   |  |   | 10 a,s  | 1,700 a,t                         |
| 33. Ethylbenzene               | 100414        |  |   |  |   | 3,100 a,s   | 29,000 a,t                        |
| 34. Methyl Bromide             | 74839         |  |   |  |   | 48 a  | 4,000 a                           |
| 35. Methyl Chloride            | 74873         |  |   |  |   | n   | n                                 |
| 36. Methylene Chloride         | 75092         |  |   |  |   | 4.7 a,c   | 1,600 a,c                         |
| 37. 1,1,2,2-Tetrachloroethane  | 79345         |  |   |  |   | 0.17 a,c,s  | 11 a,c,t                          |
| 38. Tetrachloroethylene        | 127184        |  |   |  |   | 0.8 c,s   | 8.85 c,t                          |
| 39. Toluene                    | 108883        |  |   |  |   | 6,800 a   | 200,000 a                         |
| 40. 1,2-Trans-Dichloroethylene | 156605        |  |   |  |   | 700 a   | 140,000 a                         |
| 41. 1,1,1-Trichloroethane      | 71556         |  |   |  |   | n   | n                                 |
| 42. 1,1,2-Trichloroethane      | 79005         |  |   |  |   | 0.60 a,c,s  | 42 a,c,t                          |
| 43. Trichloroethylene          | 79016         |  |   |  |   | 2.7 c,s   | 81 c,t                            |
| 44. Vinyl Chloride             | 75014         |  |   |  |   | 2 c,s   | 525 c,t                           |
| 45. 2-Chlorophenol             | 95578         |  |   |  |   | 120 a   | 400 a                             |
| 46. 2,4-Dichlorophenol         | 120832        |  |   |  |   | 93 a,s  | 790 a,t                           |
| 47. 2,4-Dimethylphenol         | 105679        |  |   |  |   | 540 a   | 2,300 a                           |
| 48. 2-Methyl-4,6-Dinitrophenol | 534521        |  |   |  |   | 13.4 s  | 765 t                             |
| 49. 2,4-Dinitrophenol          | 51285         |  |   |  |   | 70 a,s  | 14,000 a,t                        |
| 50. 2-Nitrophenol              | 88755         |  |   |  |   |   |                                   |
| 51. 4-Nitrophenol              | 100027        |  |   |  |   |   |                                   |
| 52. 3-Methyl-4-Chlorophenol    | 59507         |  |   |  |   |   |                                   |
| 53. Pentachlorophenol          | 87865         | 19 f,w   | 15 f,w  | 13   | 7.9   | 0.28 a,c  | 8.2 a,c,j                         |
| 54. Phenol                     | 108952        |  |   |  |   | 21,000 a  | 4,600,000<br>a,j,t                |
| 55. 2,4,6-Trichlorophenol      | 88062         |  |   |  |   | 2.1 a,c   | 6.5 a,c                           |
| 56. Acenaphthene               | 83329         |  |   |  |   | 1,200 a   | 2,700 a                           |
| 57. Acenaphthylene             | 208968        |  |   |  |   |   |                                   |
| 58. Anthracene                 | 120127        |  |   |  |   | 9,600 a   | 110,000 a                         |

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
Numeric criteria for priority toxic pollutants for the State of California

| A                               |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|---------------------------------|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                      | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 59. Benzidine                   | 92675         |  |   |  |   | 0.00012 a,c,s   | 0.00054 a,c,t                     |
| 60. Benzo(a)Anthracene          | 56553         |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 61. Benzo(a)Pyrene              | 50328         |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 62. Benzo(b)Fluoranthene        | 205992        |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 63. Benzo(ghi)Perylene          | 191242        |  |   |  |   |   |                                   |
| 64. Benzo(k)Fluoranthene        | 207089        |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 65. Bis(2-Chloroethoxy)Methane  | 111911        |  |   |  |   |   |                                   |
| 66. Bis(2-Chloroethyl)Ether     | 111444        |  |   |  |   | 0.031 a,c,s   | 1.4 a,c,t                         |
| 67. Bis(2-Chloroisopropyl)Ether | 39638329      |  |   |  |   | 1,400 a   | 170,000 a,t                       |
| 68. Bis(2-Ethylhexyl)Phthalate  | 117817        |  |   |  |   | 1.8 a,c,s   | 5.9 a,c,t                         |
| 69. 4-Bromophenyl Phenyl Ether  | 101553        |  |   |  |   |   |                                   |
| 70. Butylbenzyl Phthalate       | 85687         |  |   |  |   | 3,000 a   | 5,200 a                           |
| 71. 2-Chloronaphthalene         | 91587         |  |   |  |   | 1,700 a   | 4,300 a                           |
| 72. 4-Chlorophenyl Phenyl Ether | 7005723       |  |   |  |   |   |                                   |
| 73. Chrysene                    | 218019        |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 74. Dibenzo(a,h)Anthracene      | 53703         |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 75. 1,2 Dichlorobenzene         | 95501         |  |   |  |   | 2,700 a   | 17,000 a                          |
| 76. 1,3 Dichlorobenzene         | 541731        |  |   |  |   | 400   | 2,600                             |
| 77. 1,4 Dichlorobenzene         | 106467        |  |   |  |   | 400   | 2,600                             |
| 78. 3,3'-Dichlorobenzidine      | 91941         |  |   |  |   | 0.04 a,c,s  | 0.077 a,c,t                       |
| 79. Diethyl Phthalate           | 84662         |  |   |  |   | 23,000 a,s  | 120,000 a,t                       |
| 80. Dimethyl Phthalate          | 131113        |  |   |  |   | 313,000 s   | 2,900,000 t                       |
| 81. Di-n-Butyl Phthalate        | 84742         |  |   |  |   | 2,700 a,s   | 12,000 a,t                        |
| 82. 2,4-Dinitrotoluene          | 121142        |  |   |  |   | 0.11 c,s  | 9.1 c,t                           |
| 83. 2,6-Dinitrotoluene          | 606202        |  |   |  |   |   |                                   |
| 84. Di-n-Octyl Phthalate        | 117840        |  |   |  |   |   |                                   |
| 85. 1,2-Diphenylhydrazine       | 122667        |  |   |  |   | 0.040 a,c,s   | 0.54 a,c,t                        |
| 86. Fluoranthene                | 206440        |  |   |  |   | 300 a   | 370 a                             |
| 87. Fluorene                    | 86737         |  |   |  |   | 1,300 a   | 14,000 a                          |
| 88. Hexachlorobenzene           | 118741        |  |   |  |   | 0.00075 a,c   | 0.00077 a,c                       |
| 89. Hexachlorobutadiene         | 87683         |  |   |  |   | 0.44 a,c,s  | 50 a,c,t                          |
| 90. Hexachlorocyclopentadiene   | 77474         |  |   |  |   | 240 a,s   | 17,000 a,t                        |
| 91. Hexachloroethane            | 67721         |  |   |  |   | 1.9 a,c,s   | 8.9 a,c,t                         |

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
Numeric criteria for priority toxic pollutants for the State of California

| A   |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|---|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                                | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 92. Indeno(1,2,3-cd) Pyrene               | 193395        |  |   |  |   | 0.0044 a,c  | 0.049 a,c                         |
| 93. Isophorone                            | 78591         |  |   |  |   | 8.4 c,s   | 600 c,t                           |
| 94. Naphthalene                           | 91203         |  |   |  |   |   |                                   |
| 95. Nitrobenzene                          | 98953         |  |   |  |   | 17 a,s  | 1,900 a,j,t                       |
| 96. N-Nitrosodimethylamine                | 62759         |  |   |  |   | 0.00069 a,c,s   | 8.1 a,c,t                         |
| 97. N-Nitrosodi-n-Propylamine             | 621647        |  |   |  |   | 0.005 a   | 1.4 a                             |
| 98. N-Nitrosodiphenylamine                | 86306         |  |   |  |   | 5.0 a,c,s   | 16 a,c,t                          |
| 99. Phenanthrene                          | 85018         |  |   |  |   |   |                                   |
| 100. Pyrene                               | 129000        |  |   |  |   | 960 a   | 11,000 a                          |
| 101. 1,2,4-Trichlorobenzene               | 120821        |  |   |  |   |   |                                   |
| 102. Aldrin                               | 309002        | 3 g  |   | 1.3 g  |   | 0.00013 a,c   | 0.00014 a,c                       |
| 103. alpha-BHC                            | 319846        |  |   |  |   | 0.0039 a,c  | 0.013 a,c                         |
| 104. beta-BHC                             | 319857        |  |   |  |   | 0.014 a,c   | 0.046 a,c                         |
| 105. gamma-BHC                            | 58899         | 0.95 w   |   | 0.16 g   |   | 0.019 c   | 0.063 c                           |
| 106. delta-BHC                            | 319868        |  |   |  |   |   |                                   |
| 107. Chlordane                            | 57749         | 2.4 g  | 0.0043 g  | 0.09 g   | 0.004 g   | 0.00057 a,c   | 0.00059 a,c                       |
| 108. 4,4'-DDT                             | 50293         | 1.1 g  | 0.001 g   | 0.13 g   | 0.001 g   | 0.00059 a,c   | 0.00059 a,c                       |
| 109. 4,4'-DDE                             | 72559         |  |   |  |   | 0.00059 a,c   | 0.00059 a,c                       |
| 110. 4,4'-DDD                             | 72548         |  |   |  |   | 0.00083 a,c   | 0.00084 a,c                       |
| 111. Dieldrin                             | 60571         | 0.24 w   | 0.056 w   | 0.71 g   | 0.0019 g  | 0.00014 a,c   | 0.00014 a,c                       |
| 112. alpha-Endosulfan                     | 959988        | 0.22 g   | 0.056 g   | 0.034 g  | 0.0087 g  | 110 a   | 240 a                             |
| 113. beta-Endosulfan                      | 33213659      | 0.22 g   | 0.056 g   | 0.034 g  | 0.0087 g  | 110 a   | 240 a                             |
| 114. Endosulfan Sulfate                   | 1031078       |  |   |  |   | 110 a   | 240 a                             |
| 115. Endrin                               | 72208         | 0.086 w  | 0.036 w   | 0.037 g  | 0.0023 g  | 0.76 a  | 0.81 a,j                          |
| 116. Endrin Aldehyde                      | 7421934       |  |   |  |   | 0.76 a  | 0.81 a,j                          |
| 117. Heptachlor                           | 76448         | 0.52 g   | 0.0038 g  | 0.053 g  | 0.0036 g  | 0.00021 a,c   | 0.00021 a,c                       |
| 118. Heptachlor Epoxide                   | 1024573       | 0.52 g   | 0.0038 g  | 0.053 g  | 0.0036 g  | 0.00010 a,c   | 0.00011 a,c                       |
| 119-125. Polychlorinated biphenyls (PCBs) |               |  | 0.014 u   |  | 0.03 u  | 0.00017 c,v   | 0.00017 c,v                       |
| 126. Toxaphene                            | 8001352       | 0.73   | 0.0002  | 0.21   | 0.0002  | 0.00073 a,c   | 0.00075 a,c                       |
|   |               |  |   |  |   |   |                                   |
| Total Number of Criteria <sup>b</sup>     |               | 22   | 21  | 22   | 20  | 92  | 90                                |

## Footnotes to

### Table in paragraph(b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS:

- a. Criteria revised to reflect the Agency q1\* or RfD, as contained in the Integrated Risk Information System (IRIS) as of October 1, 1996. The fish tissue bioconcentration factor (BCF) from the 1980 documents was retained in each case.
- b. Criteria apply to California waters except for those waters subject to objectives in Tables III-2A and III-2B of the San Francisco Regional Water Quality Control Board's (SFRWQCB) 1986 Basin Plan that were adopted by the SFRWQCB and the State Water Resources Control Board, approved by EPA, and which continue to apply. For copper and nickel, criteria apply to California waters except for waters south of Dumbarton Bridge in San Francisco Bay that are subject to the objectives in the SFRWQCB's Basin Plan as amended by SFRWQCB Resolution R2-2002-0061, dated May 22, 2002, and approved by the State Water Resources Control Board. EPA approved the aquatic life site-specific objectives on January 21, 2003. The copper and nickel aquatic life site-specific objectives contained in the amended Basin Plan apply instead.
- c. Criteria are based on carcinogenicity of 10 (-6) risk.
- d. Criteria Maximum Concentration (CMC) equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects. Criteria Continuous Concentration (CCC) equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. ug/L equals micrograms per liter.
- e. Freshwater aquatic life criteria for metals are expressed as a function of total hardness (mg/L) in the water body. The equations are provided in matrix at paragraph (b)(2) of this section. Values displayed above in the matrix correspond to a total hardness of 100 mg/l.
- f. Freshwater aquatic life criteria for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Values displayed above in the matrix correspond to a pH of 7.8.  $CMC = \exp(1.005(pH) - 4.869)$ .  $CCC = \exp(1.005(pH) - 5.134)$ .
- g. This criterion is based on 304(a) aquatic life criterion issued in 1980, and was issued in one of the following documents: Aldrin/Dieldrin (EPA 440/5-80-019), Chlordane (EPA 440/5-80-027), DDT (EPA 440/5-80-038), Endosulfan (EPA 440/5-80-046), Endrin (EPA 440/5-80-047), Heptachlor (440/5-80-052), Hexachlorocyclohexane (EPA 440/5-80-054), Silver (EPA 440/5-80-071). The Minimum Data Requirements and derivation procedures were different in the 1980 Guidelines than in the 1985 Guidelines. For example, a "CMC" derived using the 1980 Guidelines was derived to be used as an instantaneous maximum. If assessment is to be done using an averaging period, the values given should be divided by 2 to obtain a value that is more comparable to a CMC derived using the 1985 Guidelines.
- h. These totals simply sum the criteria in each column. For aquatic life, there are 23 priority toxic pollutants with some type of freshwater or saltwater, acute or chronic criteria. For human health, there are 92 priority toxic pollutants with either "water + organism" or "organism only" criteria. Note that these totals count chromium as one pollutant even though EPA has developed criteria based on two valence states. In the matrix, EPA has assigned numbers 5a and 5b to the criteria for chromium to reflect the fact that the list of 126 priority pollutants includes only a single listing for chromium.
- i. Criteria for these metals are expressed as a function of the water-effect ratio, WER, as defined in paragraph (c) of this section.  $CMC = \text{column B1 or C1 value} \times WER$ ;  $CCC = \text{column B2 or C2 value} \times WER$ .
- j. No criterion for protection of human health from consumption of aquatic organisms (excluding water) was presented in the 1980 criteria document or in the 1986 Quality Criteria for Water. Nevertheless, sufficient information was presented in the 1980 document to allow a calculation of a criterion, even though the results of such a calculation were not shown in the document.

k. The CWA 304(a) criterion for asbestos is the MCL.

l. [Reserved]

m. These freshwater and saltwater criteria for metals are expressed in terms of the dissolved fraction of the metal in the water column. Criterion values were calculated by using EPA's Clean Water Act 304(a) guidance values (described in the total recoverable fraction) and then applying the conversion factors in §131.36(b)(1) and (2).

n. EPA is not promulgating human health criteria for these contaminants. However, permit authorities should address these contaminants in NPDES permit actions using the State's existing narrative criteria for toxics.

o. These criteria were promulgated for specific waters in California in the National Toxics Rule ("NTR"), at §131.36. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries and waters of the State defined as inland, i.e., all surface waters of the State not ocean waters. These waters specifically include the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. This section does not apply instead of the NTR for this criterion.

p. A criterion of 20 ug/l was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to the mouth of the Merced River. This section does not apply instead of the NTR for this criterion. The State of California adopted and EPA approved a site specific criterion for the San Joaquin River, mouth of Merced to Vernalis; therefore, this section does not apply to these waters.

q. This criterion is expressed in the total recoverable form. This criterion was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to Vernalis. This criterion does not apply instead of the NTR for these waters. This criterion applies to additional waters of the United States in the State of California pursuant to 40 CFR 131.38(c). The State of California adopted and EPA approved a site-specific criterion for the Grassland Water District, San Luis National Wildlife Refuge, and the Los Banos State Wildlife Refuge; therefore, this criterion does not apply to these waters.

r. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries including the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. This section does not apply instead of the NTR for these criteria.

s. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the Sacramento-San Joaquin Delta and waters of the State defined as inland ( i.e., all surface waters of the State not bays or estuaries or ocean) that include a MUN use designation. This section does not apply instead of the NTR for these criteria.

t. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays and estuaries including San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of the State defined as inland (i.e., all surface waters of the State not bays or estuaries or ocean) without a MUN use designation. This section does not apply instead of the NTR for these criteria.

u. PCBs are a class of chemicals which include aroclors 1242, 1254, 1221, 1232, 1248, 1260, and 1016, CAS numbers 53469219, 11097691, 11104282, 11141165, 12672296, 11096825, and 12674112, respectively. The aquatic life criteria apply to the sum of this set of seven aroclors.

- v. This criterion applies to total PCBs, e.g., the sum of all congener or isomer or homolog or aroclor analyses.
- w. This criterion has been recalculated pursuant to the 1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA-820-B-96-001, September 1996. See also Great Lakes Water Quality Initiative Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA-80-B-95-004, March 1995.
- x. The State of California has adopted and EPA has approved site specific criteria for the Sacramento River (and tributaries) above Hamilton City; therefore, these criteria do not apply to these waters.

**40 CFR 131.38 Editorial Note:** At 66 FR 9961, Feb. 13, 2001, §131.38 was amended in the table to paragraph (b)(1) under the column heading for "B Freshwater" by revising the column headings for "Criterion Maximum Concentration" and "Criterion Continuous Concentration"; under the column heading for "C Saltwater" by revising the column headings for "Criterion Maximum Concentration" and "Criterion Continuous Concentration"; and by revising entries "23." and "67.", effective Feb. 13, 2001. However, this is a photographed table and the amendments could not be incorporated into the text. For the convenience of the user, the amended text is set forth as follows:

1) § 131.38 Establishment of Numeric Criteria for priority toxic pollutants for the State of California.

(b)(1) \* \* \*

| A                               |               | B<br>Freshwater  |  | C<br>Saltwater   |  | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|---------------------------------|---------------|--|--|--|--|---|-----------------------------------|
| # Compound                      | CAS<br>number | Criterion<br>maximum<br>conc.<br>(µg/L) <sup>d</sup><br>B1 | Criterion<br>continous<br>conc.<br>(µg/L) <sup>d</sup><br>B2 | Criterion<br>maximum<br>conc.<br>(µg/L) <sup>d</sup><br>C1 | Criterion<br>continious<br>conc. (µg/L) <sup>d</sup><br>C2 | Water &<br>organisms<br>(µg/L)<br>D1  | Organisms<br>only<br>(µg/L)<br>D2 |
|                                 |               |  |  |  |  |   |                                   |
|                                 |               |  |  |  |  |   |                                   |
| 23. Chlorodibromomethane        | 124481        |  |  |  |  | <sup>a,c</sup> 0.41   | <sup>a,c</sup> 34                 |
|                                 |               |  |  |  |  |   |                                   |
| 67. Bis(2-Chloroisopropyl)Ether | 108601        |  |  |  |  | <sup>a</sup> 1,400  | <sup>a,t</sup> 170,000            |
|                                 |               |  |  |  |  |   |                                   |



Attachment C – (Not applicable)

Attachment D – Standard Provisions

## **I. Standard Provisions – Permit Compliance**

### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this WDR. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [40 CFR §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this WDR has not been modified to incorporate the requirement [40 CFR §122.41(a)(1)].

### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this WDR [40 CFR §122.41(c)].

### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this WDR that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR §122.41(d)].

### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this WDR. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this WDR [40 CFR §122.41(e)].

### **E. Property Rights**

1. This WDR does not convey any property rights of any sort or any exclusive privileges [40 CFR §122.41(g)].

2. The issuance of this WDR does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [40 CFR §122.5(c)].

## **F. Inspection and Entry**

The Discharger shall allow the Regional Water Quality Control Board (Regional Board), California State Water Resources Control Board (State Board), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383(c)]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this WDR [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this WDR [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this WDR [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring WDR compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [40 CFR §122.41(m)(2)].

3. Prohibition of bypass – Bypass is prohibited, and the Regional Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
  - c. The Discharger submitted notice to the Regional Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below [40 CFR §122.41(m)(3)(ii)].

#### H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR §122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph H.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for

noncompliance, is final administrative action subject to judicial review [40 CFR §122.41(n)(2)].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR §122.41(n)(3)]:
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
  - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [40 CFR §122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR §122.41(n)(4)].

## **II. Standard Provisions – Permit Action**

### **A. General**

This WDR may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any WDR condition [40 CFR §122.41(f)].

If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this WDR, this WDR shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Discharger so notified.

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this WDR after the expiration date of this WDR, the Discharger must apply for and obtain a new permit [40 CFR §122.41(b)] or submit a new NOI for re-enrollment.

### **C. Transfers**

This Order is not transferable to any person because the Regional Board is required to modify or revoke and reissue this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [40 CFR §122.41(l)(3)] [40 CFR §122.61]. A new owner or operator shall submit an NOI application to enroll in this WDR and the previous owner or operator shall submit a NOT.

### **D. Severability**

The provisions of this WDR are severable and if any provisions of this WDR or the application of any provisions of this WDR to any circumstance is held invalid, the applications of such provision to other circumstances and the remainder of this WDR shall not be affected thereby.

### **E. Pollution, Contamination, or Nuisance [CWC §13050]**

Neither the treatment nor the discharge shall create a condition of pollution, contamination or nuisance.

## **III. Standard Provisions – Monitoring**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR §122.41(j)(1)].
- B.** Monitoring results must be conducted according to test procedures under 40 CFR section 136 or, in the case of sludge use or disposal, approved under 40 CFR section 136 unless otherwise specified in 40 CFR section 503 unless other test procedures have been specified in this WDR [40 CFR §122.41(j)(4)] [40 CFR §122.44(i)(1)(iv)].

## **IV. Standard Provisions – Records**

- A.** Except for records of monitoring information required by this WDR related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR section 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this WDR, and records of all data used to complete the application for this WDR, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Board Executive Officer at any time [40 CFR §122.41(j)(2)].
- B.** Records of monitoring information shall include:
  - 1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];

2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
  3. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
  4. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
  5. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
  6. The results of such analyses [40 CFR §122.41(j)(3)(vi)].
- C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:
1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and
  2. Permit applications and attachments, permits and effluent data [40 CFR §122.7(b)(2)].

## **V. Standard Provisions – Reporting**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Board, State Board, or USEPA within a reasonable time, any information which the Regional Board, State Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this WDR or to determine compliance with this WDR. Upon request, the Discharger shall also furnish to the Regional Board, State Board, or USEPA copies of records required to be kept by this WDR [40 CFR §122.41(h)] [CWC 13267].

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Board, State Board, and/or USEPA shall be signed and certified in accordance with paragraph (B.2) and (B.3) of this provision [40 CFR §122.41(k)].
2. All permit applications shall be signed as follows:

- a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [40 CFR §122.22(a)(1)];
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 CFR §122.22(a)(2)]; or
  - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR §122.22(a)(3)].
3. All reports required by this WDR and other information requested by the Regional Board, State Board, or USEPA shall be signed by a person described in paragraph (B.2) of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    - a. The authorization is made in writing by a person described in paragraph (B.2) of this provision [40 CFR §122.22(b)(1)];
    - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [40 CFR §122.22(b)(2)]; and

- c. The written authorization is submitted to the Regional Board, State Board, or USEPA [40 CFR §122.22(b)(3)].
4. If an authorization under paragraph (B.3) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (B.3) of this provision must be submitted to the Regional Board, State Board or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].
5. Any person signing a document under paragraph (B.2) or (B.3) of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations" [40 CFR §122.22(d)].

#### C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the MRP in this WDR [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Self-Monitoring Report (SMR) form or forms provided or specified by the Regional Board or State Board for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this WDR using test procedures approved under 40 CFR section 136 or, in the case of sludge use or disposal, approved under 40 CFR section 136 unless otherwise specified in 40 CFR section 503, or as specified in this WDR, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the SMR or sludge reporting form specified by the Regional Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this WDR [40 CFR §122.41(l)(4)(iii)].



#### D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this WDR, shall be submitted no later than 14 days following each schedule date [40 CFR §122.41(l)(5)].

#### E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this WDR [40 CFR §122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this WDR [40 CFR §122.41(l)(6)(ii)(B)].
  - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this WDR to be reported within 24 hours [40 CFR §122.41(l)(6)(ii)(C)].
3. The Regional Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR §122.41(l)(6)(iii)].

#### F. Planned Changes

The Discharger shall give notice to the Regional Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR §122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [40 CFR §122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which

are subject neither to effluent limitations in this WDR nor to notification requirements under 40 CFR section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §122.41(l)(1)(ii)]; or

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 CFR §122.41(l)(1)(iii)].

#### **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Board or State Board of any planned changes in the permitted facility or activity that may result in noncompliance with the requirements of this WDR [40 CFR §122.41(l)(2)].

#### **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 CFR §122.41(l)(7)].

#### **I. Discharge Monitoring Quality Assurance (DMQA) Program [STATE WATER BOARD/USEPA 106 MOA]**

The Discharger shall conduct appropriate analyses on any sample provided by USEPA as part of the DMQA program. The results of such analyses shall be submitted to USEPA's DMQA manager.

#### **J. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Board, State Board, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR §122.41(l)(8)].

### **VI. Standard Provisions – Enforcement**

- A. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved

under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR §122.41(a)(2)] [CWC 13385 and 13387].

- B.** Any person may be assessed an administrative penalty by the Regional Board for violating CWA section 301, 302, 306, 307, 308, 318 or 405, or any permit condition or limitation implementing any of such sections in a permit issued under CWA section 402. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day, during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR §122.41(a)(3)].
- C.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both [40 CFR §122.41(j)(5)].
- D.** The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this WDR, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by

a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR §122.41(k)(2)].

## **VII. Additional Provisions – Notification Levels**

### **A. Non-Municipal Facilities**

Dischargers of existing manufacturing, commercial, mining, and silvicultural wastes shall notify the Regional Board as soon as they know or have reason to believe [40 CFR §122.42(a)]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this WDR, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(1)]:
  - a. 100 micrograms per liter (µg/L) [40 CFR §122.42(a)(1)(i)];
  - b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(1)(ii)];
  - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(1)(iii)]; or
  - d. The level established by the Regional Board in accordance with 40 CFR section 122.44(f) [40 CFR §122.42(a)(1)(iv)].
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this WDR, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(2)]:
  - a. 500 micrograms per liter (µg/L) [40 CFR §122.42(a)(2)(i)];
  - b. 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(2)(ii)];
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(2)(iii)]; or
  - d. The level established by the Regional Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(2)(iv)].

### **B. Publicly-Owned Treatment Works (POTWs) (Not Applicable)**

## Attachment E – Monitoring and Reporting Program (MRP)

Title 40 of the Code of Federal Regulations (CFR) section 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the California Regional Water Quality Control Board (Regional Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### I. General Monitoring Provisions

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring location identified in the representative sampling and analysis program. Another waste stream, body of water, or substance shall not dilute the monitored discharge. Monitoring points shall not be changed without notification to and the approval of the appropriate Regional Board.
- B. Monitoring must be conducted according to USEPA test procedures approved under 40 CFR section 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act as amended, unless other test procedures are specified in this WDR and/or by the appropriate Regional Board.
- C. If the Discharger monitors any pollutant more frequently than required by this WDR using test procedures approved under 40 CFR section 136, or as specified in this WDR or by the appropriate Regional Board, the results of the monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's Annual Report. The increased frequency of monitoring shall also be reported.
- D. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this WDR.
- E. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the appropriate Regional Board.
- F. All monitoring instruments and devices used by the Discharger to fulfill the monitoring program shall be properly maintained and calibrated to ensure accuracy. All flow measurement devices shall be calibrated at least once per year to ensure accuracy of the devices.
- G. Order No. R9-2008-0002 may be modified by the Regional Board and EPA to enable the discharger to participate in comprehensive regional monitoring activities conducted in the Southern California Bight during the term of this permit. The intent of regional monitoring activities is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled scientific resources of the region. During these coordinated sampling efforts, the discharger's sampling and analytical effort may be reallocated to provide a regional assessment of the impact of the discharge of municipal wastewater to the

Southern California Bight. Anticipated modifications to the monitoring program will be coordinated so as to provide a more comprehensive picture of the ecological and statistical significance of monitoring results and to determine cumulative impacts of various pollution sources. If predictable relationships among the biological, water quality and effluent monitoring variables can be demonstrated, it may be appropriate to decrease the discharger's sampling effort. Conversely, the monitoring program may be intensified if it appears that the objectives cannot be achieved through the discharger's existing monitoring program. These changes will improve the overall effectiveness of monitoring in the Southern California Bight. Minor changes may be made without further public notice.

## **II. Monitoring Locations**

- A.** Dischargers enrolling for the first time under this WDR shall develop a representative sampling and analysis program to be used as case studies to represent the typical types of discharges occurring within their service areas. This study, to be submitted as the first annual report, will include the monitoring locations and rationale for choosing those locations.
- B.** Re-enrollees must submit a new case study defining monitoring locations and rationale for these locations, if there are new types of discharges.

## **III. Influent Monitoring Requirements (Not Applicable)**

## **IV. Effluent Monitoring Requirements**

- A.** Dischargers who are enrolling for the first time under this WDR shall develop a representative sampling and analysis program based on the discharge anticipated from the extracted groundwater activity as compared to the Effluent Limitations and Discharge Specifications established in this Permit to ensure the discharge will not violate Regional Board Discharge Prohibitions.
- B.** The Regional Board may increase monitoring requirements on a case-by-case basis. Additional monitoring for individual discharges may be required, where necessary, to show that during the term of the discharge, applicable water quality objectives will be maintained.
- C.** For certain metals, the hardness of the receiving water is required to calculate the effluent limit, therefore the Discharger shall measure the hardness of the receiving water at the same frequency as metals analysis.
- D. Treatment System Status**  
The daily status (e.g., onsite, in operation/on standby, etc.) of any treatment systems used to achieve compliance with this WDR or the Notice of Enrollment from the Regional Board shall be reported monthly.

## E. GROUNDWATER DISCHARGE MONITORING

- For discharges associated with gasoline or diesel underground or above ground storage tanks (Remediation Projects) (as determined by the Regional Board), the discharge monitoring shall be conducted as listed below. For remediation of groundwaters containing individual solvents (e.g. trichloroethylene, tetrachloroethane, etc.) not associated with fuel products, or other substances with effluent concentration limitations in Order No. R9-2008-0002, the monitoring requirements may be modified in the Notice of Enrollment to include a sampling frequency of once every two weeks for the individual compound(s) present in lieu of benzene, ethylbenzene, toluene, and xylene (collectively BTEX) monitoring requirements, provided that BTEX are not present, and the results reported monthly:

| (a) Constituent               | Units | Sample Type | Analysis Frequency    | Reporting Frequency |
|-------------------------------|-------|-------------|-----------------------|---------------------|
| Flowrate                      | gpd   | NA          | daily                 | monthly             |
| Total Nitrogen                | mg/L  | grab        | quarterly             | quarterly           |
|                               | lb/d  | "           | "                     | "                   |
| Total Phosphorus              | mg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Settleable Solids             | ml/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Total Suspended Solids        | mg/L  | "           | quarterly             | quarterly           |
|                               | lb/d  | "           | "                     | "                   |
| (b) Constituent               | Units | Sample Type | Analysis Frequency    | Reporting Frequency |
| Hydrogen Sulfide              | µg/L  | grab        | semiannually          | semiannually        |
|                               | lb/d  | "           | "                     | "                   |
| Total Residual Chloride (TRC) | µg/L  | "           | daily if chlorinating | monthly             |
|                               | lb/d  | "           | "                     | "                   |
| pH                            | Units | "           | monthly               | monthly             |
| Benzene                       | µg/L  | "           | every 2 weeks         | monthly             |
|                               | lb/d  | "           | "                     | "                   |
| Ethylbenzene                  | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Toluene                       | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Xylene                        | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| MTBE                          | µg/L  | "           | "                     | "                   |

| Constituent                             | Units | Sample Type | Analysis Frequency | Reporting Frequency |
|---|-------|-------------|--------------------|---------------------|
| Total Petroleum                         | µg/L  | grab        | monthly            | monthly             |
| Hydrocarbons                            | lb/d  | "           | "                  | "                   |
| Tributyltin                             | µg/L  | "           | semiannually       | semiannually        |
|   | lb/d  | "           | "                  | "                   |
| Arsenic                                 | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Cadmium                                 | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Chromium                                | µg/L  | "           | "                  | "                   |
| (hexavalent)                            | lb/d  | "           | "                  | "                   |
| Copper <sup>CTR</sup>                   | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Lead                                    | µg/L  | "           | quarterly          | quarterly           |
|   | lb/d  | "           | "                  | "                   |
| Mercury                                 | µg/L  | "           | semiannually       | semiannually        |
|   | lb/d  | "           | "                  | "                   |
| Nickel                                  | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Silver                                  | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Zinc                                    | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Cyanide                                 | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Phenolic Compounds<br>(non-chlorinated) | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |

| (c) Constituent                    | Units | Sample Type | Analysis Frequency | Reporting Frequency |
|------------------------------------|-------|-------------|--------------------|---------------------|
| Chlorinated Phenolics              | µg/L  | grab        | semiannually       | semiannually        |
|                                    | lb/d  | "           | "                  | "                   |
| Acute Toxicity                     | TUa   | "           | quarterly          | quarterly           |
| Chronic Toxicity                   | TUc   | "           | "                  | "                   |
| 1,1,2,2-Tetrachloroethane<br>(PCA) | µg/L  | "           | semiannually       | semiannually        |
| 1,1,1-Trichloroethane<br>(TCA)     | mg/L  | "           | "                  | "                   |
| 1,1,2-Trichloroethane<br>(TCA)     | mg/L  | "           | "                  | "                   |
| 1,2-Dichloroethane                 | µg/L  | "           | "                  | "                   |
| Tetrachloroethylene<br>(PCE)       | µg/L  | "           | "                  | "                   |



| Constituent  | Units | Sample Type | Analysis Frequency | Reporting Frequency |
|--|-------|-------------|--------------------|---------------------|
| Trichloroethylene (TCE)  | µg/L  | "           | "                  | "                   |
| Vinyl Chloride <sup>6</sup>  | µg/L  | "           | "                  | "                   |
| Carbon Tetrachloride   | µg/L  | "           | "                  | "                   |
| Base/Neutrals  | µg/L  | "           | "                  | "                   |
|  | lb/d  | "           | "                  | "                   |
| 126 Priority Pollutants – Attachment B2<br>(Excluding Above Marked Pollutants) |       | "           | "                  | "                   |

2. For discharges which are not associated with gasoline or diesel underground or above ground storage tanks (as determined by the Regional Board), discharge monitoring shall be conducted as follows:

| (d) Constituent               | Units | Sample Type | Analysis Frequency    | Reporting Frequency |
|-------------------------------|-------|-------------|-----------------------|---------------------|
| Flowrate                      | gpd   | na          | daily                 | quarterly           |
| Total Nitrogen                | mg/L  | grab        | quarterly             | quarterly           |
| Total Phosphorus              | mg/L  | "           | "                     | "                   |
| Settleable Solids             | ml/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Total Suspended Solids        | mg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Hydrogen Sulfide              | mg/L  | "           | semiannually          | semiannually        |
|                               | lb/d  | "           | "                     | "                   |
| Total Residual Chlorine (TRC) | µg/L  | "           | daily if chlorinating | monthly             |
|                               | lb/d  | "           | "                     | "                   |
| pH                            | Units | "           | monthly               | quarterly           |

| (e) Constituent              | Units | Sample Type | Analysis Frequency | Reporting Frequency |
|------------------------------|-------|-------------|--------------------|---------------------|
| Total Petroleum Hydrocarbons | µg/L  | grab        | quarterly          | quarterly           |
|                              | lb/d  | "           | "                  | "                   |
| MTBE                         | µg/L  | "           | "                  | "                   |
| Tributyltin                  | µg/L  | "           | semiannually       | semiannually        |
|                              | lb/d  | "           | "                  | "                   |
| Arsenic                      | µg/L  | "           | "                  | "                   |
|                              | lb/d  | "           | "                  | "                   |
| Cadmium                      | µg/L  | "           | "                  | "                   |
|                              | lb/d  | "           | "                  | "                   |
| Chromium (hexavalent)        | µg/L  | "           | "                  | "                   |
|                              | lb/d  | "           | "                  | "                   |
| Copper                       | µg/L  | "           | "                  | "                   |
|                              | lb/d  | "           | "                  | "                   |

DISCHARGES FROM GROUNDWATER  
EXTRACTION TO SURFACE WATERS IN  
THE SAN DIEGO REGION EXCEPT SAN DIEGO BAY

ORDER NO. R9-2008-0002  
NPDES NO. CAG919002

| Constituent  | Units | Sample Type | Analysis Frequency | Reporting Frequency |
|--|-------|-------------|--------------------|---------------------|
| Lead   | µg/L  | "           | "                  | "                   |
|  | lb/d  | "           | "                  | "                   |
| Mercury  | µg/L  | "           | "                  | "                   |
|  | lb/d  | "           | "                  | "                   |
| Nickel   | µg/L  | "           | "                  | "                   |
|  | lb/d  | "           | "                  | "                   |
| Silver   | µg/L  | "           | "                  | "                   |
|  | lb/d  | "           | "                  | "                   |
| Zinc   | µg/L  | "           | "                  | "                   |
|  | lb/d  | "           | "                  | "                   |
| Cyanide  | µg/L  | "           | "                  | "                   |
|  | lb/d  | "           | "                  | "                   |
| Phenolic Compounds<br>(non-chlorinated)  | µg/L  | "           | "                  | "                   |
|  | lb/d  | "           | "                  | "                   |
| Chlorinated Phenolics  | µg/L  | "           | "                  | "                   |
|  | lb/d  | "           | "                  | "                   |
| Acute Toxicity   | TUa   | "           | quarterly          | quarterly           |
| Chronic Toxicity   | TUc   | "           | "                  | "                   |
| Base/Neutrals  | µg/L  | "           | semiannually       | semiannually        |
|  | lb/d  | "           | "                  | "                   |
| 126 Priority Pollutants – Attachment B2<br>(Excluding Above Marked Pollutants) |       | "           | "                  | "                   |

3. For long term discharges (greater than 6 months) in RURAL AREAS (as determined by the Regional Board), discharge monitoring shall be conducted as follows:

| (f) Constituent                         | Units | Sample Type | Analysis Frequency    | Reporting Frequency |
|---|-------|-------------|-----------------------|---------------------|
| Flowrate                                | gpd   | na          | daily                 | monthly             |
| Total Nitrogen                          | mg/L  | grab        | quarterly             | quarterly           |
| Total Phosphorus                        | mg/L  | "           | "                     | "                   |
|   | lb/d  | "           | "                     | "                   |
| Settleable Solids                       | ml/L  | "           | "                     | "                   |
|   | lb/d  | "           | "                     | "                   |
| Total Suspended Solids                  | mg/L  | "           | "                     | "                   |
| Hydrogen Sulfide                        | µg/L  | "           | "                     | "                   |
| Total Petroleum                         |       | "           | "                     | "                   |
| Hydrocarbons                            | µg/L  | "           | "                     | "                   |
| Total Residual Chlorine (TRC)           | µg/L  | "           | daily if chlorinating | monthly             |
|   | lb/d  | "           | "                     | "                   |
| pH                                      | Units | "           | monthly               | quarterly           |
| MTBE                                    | µg/L  | "           | quarterly             | quarterly           |
| Acute Toxicity                          | TUa   | "           | semiannually          | semiannually        |
| Chronic Toxicity                        | TUc   | "           | "                     | "                   |
| Base/Neutrals                           | µg/L  | "           | "                     | "                   |
| 126 Priority Pollutants – Attachment B2 |       |             | "                     | "                   |

4. For short term (duration of 6 months or less at a particular groundwater extraction site) discharges in RURAL AREAS, monitoring shall be conducted as follows:

| (g) Constituent               | Units | Sample Type | Analysis Frequency    | Reporting Frequency |
|-------------------------------|-------|-------------|-----------------------|---------------------|
| Flowrate                      | gpd   | na          | daily                 | monthly             |
| Total Nitrogen                | mg/L  | grab        | every two weeks       | monthly             |
| Total Phosphorus              | mg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Settleable Solids             | ml/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Total Suspended Solids        | mg/L  | "           | "                     | "                   |
| Hydrogen Sulfide              | µg/L  | "           | "                     | "                   |
| Total Petroleum               |       | "           | "                     | "                   |
| Hydrocarbons                  | µg/L  | "           | every two weeks       | monthly             |
| Total Residual Chlorine (TRC) | µg/L  | "           | daily if chlorinating | "                   |
|                               | lb/d  | "           | "                     | "                   |
| pH                            | Units | "           | monthly               | quarterly           |
| MTBE                          | µg/L  | "           | quarterly             | "                   |
|                               |       |             | <b>Analysis</b>       | <b>Reporting</b>    |

| (h) Constituent                         | Units | Sample Type | Frequency    | Frequency    |
|---|-------|-------------|--------------|--------------|
| Acute Toxicity                          | TUa   | grab        | semiannually | semiannually |
| Chronic Toxicity <sup>5</sup>           | TUc   | "           | "            | "            |
| Base/Neutrals <sup>7</sup>              | µg/L  | "           | "            | "            |
| 126 Priority Pollutants – Attachment B2 | "     | "           | "            | "            |

5. For short term (duration of 6 months or less at a particular groundwater extraction site) discharges in URBAN AREAS, discharge monitoring shall be conducted as follows:

| (i) Constituent               | Units | Sample Type | Analysis Frequency    | Reporting Frequency |
|-------------------------------|-------|-------------|-----------------------|---------------------|
| Flowrate                      | gpd   | NA          | daily                 | monthly             |
| Total Nitrogen                | mg/L  | grab        | every other week      | "                   |
| Total Phosphorus              | mg/L  | "           | "                     | "                   |
| Settleable Solids             | ml/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Total Suspended Solids        | mg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Hydrogen Sulfide              | mg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Total Residual Chlorine (TRC) | µg/L  | "           | daily if chlorinating | "                   |
| pH                            | Units | "           | every other week      | "                   |
| Total Petroleum Hydrocarbons  | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| MTBE                          | µg/L  | "           | "                     | "                   |
| Tributyltin                   | µg/L  | "           | semiannually          | semiannually        |
|                               | lb/d  | "           | "                     | "                   |
| Arsenic                       | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Cadmium                       | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Chromium (hexavalent)         | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Copper                        | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Lead                          | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Mercury                       | µg/L  | "           | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |
| Nickel                        | µg/L  | grab        | "                     | "                   |
|                               | lb/d  | "           | "                     | "                   |

| (j) Constituent                         | Units | Sample Type | Analysis Frequency | Reporting Frequency |
|---|-------|-------------|--------------------|---------------------|
| Silver                                  | µg/L  | "           | semiannually       | semiannually        |
|   | lb/d  | "           | "                  | "                   |
| Zinc                                    | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Cyanide                                 | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Phenolic Compounds<br>(non-chlorinated) | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Chlorinated Phenolics                   | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| Chronic Toxicity                        | TUc   | "           | quarterly          | quarterly           |
| Base/Neutrals                           | µg/L  | "           | "                  | "                   |
|   | lb/d  | "           | "                  | "                   |
| 126 Priority Pollutants – Attachment B2 |       |             |                    |                     |
| (Excluding Above Marked Pollutants)     |       | "           | semiannually       | semiannually        |

6. For discharges associated with Sewer System Replacement, or Wastewater Treatment Plant Construction or Expansion Projects, in addition to monitoring for those Constituents listed in Monitoring Provision E, discharge monitoring shall be conducted for the following:

| Constituent             | Units     | Sample Type | Minimum Frequency Of Analysis | Reporting Frequency |
|-------------------------|-----------|-------------|-------------------------------|---------------------|
| Total Coliform          | MPN100/ml | grab        | weekly                        | Monthly             |
| Fecal Coliform          | "         | "           | "                             | "                   |
| Dissolved Oxygen        | mg/L      | "           | "                             | "                   |
| 126 Priority Pollutants | ---       | "           | semiannually                  | Semiannually        |
| – Attachment B2         |           |             |                               |                     |

#### E. RECEIVING WATER MONITORING

The discharger shall obtain a monthly upstream sample of the receiving water if the discharge is to a river or stream; or from an area unaffected by the discharge for other receiving waters, and analyze the sample for turbidity and report the results monthly. The turbidity of the receiving water is necessary to determine compliance of the effluent turbidity. The discharger shall also submit a monthly report discussing any turbidity plumes created by the discharge including a description (e.g., color, extent, duration, etc.) of any turbidity plumes.

For discharges to surf zones, in lieu of obtaining turbidity samples in unaffected areas, the discharger shall submit a monthly report describing (e.g., color, extent, duration, etc.) any turbidity plumes caused by the discharge.

The Regional Board may increase receiving water monitoring requirements on a case-by-case basis. Additional receiving water monitoring for individual discharges may be required, where necessary, to show that during the term of the discharge, applicable surface water quality objectives will be maintained.

For certain metals, the hardness of the receiving water is required to calculate the effluent limit, therefore the discharger shall measure the hardness of the receiving water at the same frequency as metals analysis.

F. ANNUAL SUMMARY OF MONITORING DATA

A summary of monitoring data for the previous year shall be submitted to the Regional Board previous to March 1<sup>st</sup> of each year. The report shall contain both tabular and graphical summaries of the previous year's data. If the duration of the discharge is six months or less, an annual summary is not required.

G. REPORT OF DISCHARGE TERMINATION

Within thirty days of the termination of the discharge, the discharger shall submit a letter to the Regional Board specifying the date the groundwater extraction waste discharge was terminated.

H. REPORTING FREQUENCY

Monitoring reports shall be submitted to the Regional Board in accordance with the following schedule:

| <u>REPORTING FREQUENCY</u> | <u>REPORT PERIOD</u>   | <u>REPORT DUE</u>                                 |
|----------------------------|--|---|
| Monthly                    | January, February<br>March, April, May<br>June, July, August<br>September, October<br>November, December | By the 30th<br>day of the<br>following<br>month*. |

\* The monthly report for January is due no later than February 28th

|              |                    |            |
|--------------|--------------------|------------|
| Quarterly    | January - March    | April 30   |
|              | April - June       | July 30    |
|              | July - September   | October 30 |
|              | October - December | January 30 |
| Semiannually | January - June     | July 30    |
|              | July - December    | January 30 |
| Annual       | January - December | March 1    |

Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports.

The results of such analysis shall be reported in the annual report. Grab samples shall be collected at the applicable point of discharge (either at the storm drain or the receiving water). If a Discharger monitors the above constituents more frequently than required by this WDR, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the annual report. Separate annual reports are required for each region.

- I. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this WDR, and records of all data used to complete the application for this WDR, for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of this Regional Board. These records shall include:
  1. The date, place, and time of site inspections, sampling, visual observation, and/or measurement;
  2. The individual(s) who performed the site inspections, sampling, visual observations, and/or measurements;
  3. The dimension, size and/or volume of vault;
  4. Flow measurements (if required) and duration of discharge;
  5. The estimated volume of discharge;
  6. The date and time of analyses;
  7. The laboratory, staff, or wholesaler who performed the analyses; and
  8. Analytical results.
- J. Toxicity Reduction Evaluation (TRE)

The enrollee shall develop a Toxicity Reduction Evaluation (TRE) workplan. The workplan shall be subject to the approval of the Regional Board and shall be modified as directed by the Regional Board. Enrollees shall submit the TRE workplan to the Regional Board upon request of the Regional Board. The TRE

workplan shall be developed no later than six months after adoption of this WDR in accordance with the following manuals:

1. Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070).
  2. Toxicity Identification Evaluation (TIE), Phase I (EPA/600/6-91/005F).
  3. Methods for Aquatic Toxicity Identification Evaluations, Phase II (EPA/600/R-92/080).
  4. Methods for Aquatic Toxicity Identification Evaluations, Phase III (EPA/600/R-92/081).
- K. If toxicity-testing results show a violation of any acute toxicity limitation identified in Discharge Specifications of this WDR, the enrollee shall:
1. Take all reasonable measures necessary to immediately minimize toxicity; and
  2. Increase the frequency of the toxicity test(s), which showed a violation, to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.
- L. If the Regional Board determines that toxicity testing shows consistent violation of any acute toxicity limitation identified in Discharge Specifications of this WDR, the enrollee shall conduct a TRE that includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the enrollee shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations identified in Discharge Specifications of this WDR.
- M. Within 14 days of completion of the TRE, the enrollee shall submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with all the toxicity limitations of this WDR and to prevent recurrence of violations of those limitations, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the Regional Board.

## **V. Whole Effluent Toxicity Testing Requirements**

Whole effluent toxicity (WET) tests measure the aggregate toxic effect of a mixture of pollutants that may be present in a waste stream and provides information on potential toxic impacts to receiving waters from the discharge of wastes. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach provides a means of assessing compliance with the narrative toxicity water quality objective for aquatic life protection of the Basin Plan while implementing numeric criteria for toxicity.



There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and development.

This order requires that a Toxicity Reduction Evaluation (TRE) be conducted if a discharge causes or contributes to chronic toxicity in a receiving water body. This WDR requires the Discharger to periodically monitor the toxicity of its discharge and to develop a TRE Workplan if the toxicity effluent limitations are exceeded.

- VI. Land Discharge Monitoring Requirements (Not Applicable)**
- VII. Reclamation Monitoring Requirements (Not Applicable)**
- VIII. Receiving Water Monitoring Requirements – SURFACE WATER AND GROUNDWATER (Not Applicable)**
- IX. Other Monitoring Requirements (Not Applicable)**
- X. Reporting Requirements**

- A. General Monitoring and Reporting Requirements**

All reports submitted in response to this WDR shall comply with signatory requirements set forth in the Standard Provisions.

- B. Self Monitoring Reports (SMRs) to State and Regional Board**

1. At any time during the term of this permit, the State or Regional Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall submit annual monitoring results to the Regional Board by the 20th day of March for the preceding calendar year. The Discharger shall report in the SMR the results for all monitoring specified in this MRP. The Discharger shall submit annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this WDR. If the Discharger monitors any pollutant more frequently than required by this WDR, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. The Discharger shall submit SMRs in accordance with the following requirements:

- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that are entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of this WDR; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- c. SMRs must be submitted to the appropriate Regional Board, signed and certified as required by the Standard Provisions (Attachment D).

**C. Discharge Monitoring Reports (DMRs) to EPA**

When requested by USEPA, the Discharger shall also complete and submit Discharge Monitoring Reports to USEPA. The submittal date shall be specified in the request.

**D. OTHER REPORTS (NOT APPLICABLE)**

## Attachment F – Fact Sheet

As described in section III of this WDR, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this WDR.

### I. Permit Information

#### A. INTRODUCTION

This Order establishes a WDR regulating the discharge of groundwater extraction waste discharges to surface waters in the San Diego Region except San Diego Bay from all construction groundwater extraction, and similar waste discharges.

#### B. BACKGROUND

In 1972, the Federal Water Pollution Control Act, currently referred to as the Federal Clean Water Act (CWA), was amended to provide that the discharge of pollutants to waters of the United States from any point source is prohibited, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The federal regulations allow authorized states to issue either general permits or individual permits to regulate discharges of pollutants to waters of the United States. On January 28, 1991, the California Regional Water Quality Control Board, San Diego Region (Regional Board) issued a General Waste Discharge Requirement for Groundwater Remediation and Dewatering Wastes Discharges to Surface Waters within the San Diego Region except for San Diego Bay (Order No. 91-10). The permit was reissued two more times on June 13, 1996 (Order No. 96-41) and October 10, 2001 (Order No. 2001-96).

In accordance with Title 40, Code of Federal Regulations (CFR), the Regional Board must meet general program requirements prior to the re-issuance and adoption of a general NPDES permit. General program requirements include preparing a draft WDR, public noticing, allowing a public comment period, and conducting a public hearing. To meet these requirements, the Regional Board prepared a draft WDR. The tentative WDR was made available to interested parties and posted on the Regional Board's website on February 5, 2008 for comments. A public hearing to receive testimony from interested parties was scheduled for March 12, 2008. A public hearing notice was posted in the San Diego Union-Tribune, The Riverside Press-Enterprise, and The Orange County Register, major newspapers in the San Diego Region, on February 8, 2008. The public written comment period ended March 5, 2008 and the public oral comment period ended March 12, 2008 at the Regional Board meeting.

#### C. GENERAL CRITERIA

Extracted groundwater may contain pollutants which may be found in groundwaters as a result of decomposition of organic materials (e.g., hydrogen

sulfide), leaking underground storage tanks and fuel lines, surface spills, sewage, past use of liquid waste impoundments, or the potential presence of nutrients (phosphorus and nitrogen compounds).

The San Diego Regional Water Quality Control Board (hereinafter Regional Board) is aware that petroleum pollutant plumes exist in groundwaters in areas subject to construction groundwater extraction. In addition to construction groundwater extraction discharges, groundwater remediation projects required by cleanup and abatement orders issued by the Regional Board may require the discharge of treated groundwater. In addition to petroleum products and solvents, groundwaters may contain elevated concentrations of other pollutants that could degrade surface waters. These other pollutants may include metals, nutrients (nitrogen and phosphorus), hydrogen sulfide, solids, and other inorganic and organic compounds.

Existing and proposed discharges of groundwater extraction waste from construction groundwater extraction, foundation groundwater extraction, and groundwater cleanup projects:

- a) Result from similar operations (all involve extraction and discharge of groundwater);
- b) Are the same type of waste (all are groundwater);
- c) Require similar effluent limitations for the protection of the beneficial uses of the receiving waters;
- d) Require similar monitoring; and
- e) Are more appropriately regulated under a general permit rather than individual permits.

Order No. 2001-96, applied to all groundwater extraction waste discharges of greater than 100,000 gpd. For purposes of renewing NPDES permit No. 2001-96 (Tentative Order No. R9-2008-0002), historical monitoring data has been reviewed. Based on the data review results, lack of complaints of adverse impacts to water quality and/or beneficial uses of the receiving waters, and lack of documentation of adverse impacts to water quality and/or beneficial uses of the receiving waters, discharges of groundwater to all receiving waters within the region except discharges to San Diego Bay less than 100,000 gallons per day and where no known contamination exists, probably will not have an adverse effect on the receiving water/environment.

This WDR does not cover:

STORM WATER - Storm water runoff due to construction activities. These activities may be covered under the statewide general NPDES permit for storm water discharges associated with construction activities (CAS000002), the

statewide general NPDES permit for Storm Water Runoff Associated With Small Linear Underground/Overhead Construction Projects (CAS000005), and/or Clean Water Act (CWA) Section 401 Water Quality Certifications.

**SANITARY SEWER** - Discharges to a sanitary sewer. These discharges do not need coverage under the NPDES Program, although the agency controlling the sanitary sewer must approve discharges to its conveyance system.

**UTILITY VAULTS** - Discharges from utility vaults and underground structures. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water Order No. 2006-0008-DWQ (CAG990002).

**HYDROSTATIC/ POTABLE WATER** – Discharges from drinking water well development. These discharges are covered in Order No. R9-2002-0020 (CAG679001).

#### Notification Requirements

The purpose of this WDR is to facilitate regulation of discharges from groundwater extraction activities. To obtain coverage under this WDR, the Discharger must submit a Notice of Intent (NOI), a project map(s), an initial Monitoring Report, and first annual fee. Signing the certification on the NOI signifies that the Discharger intends to comply with the provisions and requirements of this WDR. AN NOI must be signed to be valid.

#### **D. DISCHARGE TO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)**

Prior to discharging into an MS4, the Discharger shall demonstrate alternatives to discharging extracted groundwater waste into an MS4 and why it is technically or economically infeasible to implement these alternatives.

Without prior approval from the appropriate local agency with jurisdiction over the MS4, the discharger shall not discharge extracted groundwater waste under this WDR into an MS4.

Local agencies responsible for operating the MS4s may not passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the MS4 operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or control. These discharges may cause or contribute to a condition of contamination or a violation of water quality standards.

Therefore, at least 30 days prior to initiating an extracted groundwater discharge to an MS4, the Discharger shall notify and receive authorization from the appropriate local agency with jurisdiction over the MS4. This requirement encourages communication between Dischargers enrolled under this WDR and

local agencies responsible for MS4s in an effort to reduce misunderstandings and concerns over the types of discharges covered by this WDR.

#### E. DISCHARGE DESCRIPTION

Groundwaters in some urban areas are known to be contaminated with petroleum products and solvents due to underground storage tank leaks and pipeline leaks. Discharges of groundwater to receiving waters within the region will be required to comply with the effluent limitations contained in this Order and protect the beneficial uses of the receiving waters.

Regional Board staff expects that a number of the groundwater project proponents will propose discharges to surface waters which will require National Pollutant Discharge Elimination System (NPDES) permits.

Any discharge of untreated groundwater to a surface water may cause or contribute to excursions above narrative water quality objectives contained in the Ocean Plan and/or Basin Plan as a result of the potential discharge of petroleum related compounds, solvents, and metals.

Enrollees under this WDR that are in close proximity of the ocean, a bay, harbor, lagoon or estuary, may encounter saline groundwater, in which case the use of EPA Method 1638, and EPA Method 1640 (Clean Technologies) would be appropriate for the analysis of metals in saline samples.

#### FACILITY DESCRIPTIONS - TREATMENT FACILITIES AND OUTFALLS

This general NPDES permit contains effluent limitations which may require the application of 'best available treatment economically achievable' for the removal of petroleum products and organic compounds from each groundwater project proponent's discharge. The general NPDES permit will require each Enrollee to certify the adequacy of each component of treatment facilities or a contingency plan prior to initiating a discharge. Each Enrollee's certification report shall contain a requirement-by-requirement analysis, based on accepted engineering practice, of how the contingency plan or process and physical design of the facilities will ensure compliance with this Order.

Groundwater may be discharged to a variety of receiving waters, storm drains, or other conveyance systems tributary to receiving waters within the region. Because outfalls are not designed to achieve maximum initial dilution and dispersion of discharges, initial dilution factors for discharges to inland surface waters, bays, estuaries, and lagoons are conservatively assumed to equal zero.

An initial dilution factor of three is assumed for discharges to the surf zone. The initial dilution factor is based on a preliminary dilution model submitted by Professor Gerhard H. Jirka, School of Civil and Environmental Engineering, Cornell University, for a dewatering project for the international treatment facility ocean outfall near Tijuana. This particular model assumes that:

- a) Mixing of the dewatering discharge is primarily controlled by wave-induced turbulence and longshore conditions;
- b) 0.55 meter wave height with a 15 second period occurring with a 95 percent exceedance probability;
- c) A longshore velocity of 5 to 10 centimeters per second; and
- d) A near-shore beach slope of 3 percent.

The model results in an initial dilution ratio of six. Since the model does not represent topographic and wave conditions throughout the region, the initial dilution factor for discharges to surf zones was halved.

#### **F. DESCRIPTION OF WASTEWATER AND BIOSOLIDS TREATMENT OR CONTROLS (NOT APPLICABLE)**

#### **G. DISCHARGE POINTS AND RECEIVING WATERS**

Under the WDR, there may be multiple discharge points. Additional information regarding the receiving waters can be found in the completed NOI which describes the discharge and identifies the points of discharge.

The Comprehensive Water Quality Control Plan Report, San Diego Basin (9), (Basin Plan) was adopted by this Regional Board on September 8, 1994, and subsequently approved by the State Water Resource Control Board (hereinafter SWRCB) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the SWRCB. The Basin Plan designates beneficial uses, narrative and numerical water quality objectives, and prohibitions which are applicable to the groundwater extraction waste discharges regulated under this Order.

The Basin Plan identifies the following beneficial uses of the surface waters in the San Diego Region to be protected (not all surface waters have all of the beneficial uses listed below):

- Municipal and domestic supply;
- Agricultural supply;
- Industrial service supply;
- Industrial process supply;
- Groundwater recharge;
- Freshwater replenishment;
- Navigation;
- Hydropower generation;

- Contact water recreation;
- Non-contact water recreation;
- Commercial and sport fishing;
- Warm freshwater habitat;
- Cold freshwater habitat;
- Preservation of Biological Habitats of Special Significance;
- Inland saline water habitat;
- Wildlife habitat;
- Rare, threatened, or endangered species;
- Marine habitat;
- Migration of aquatic organisms;
- Spawning, reproduction, and/or early development;
- Shellfish harvesting;
- Estuarine habitat; and
- Aquaculture

In order to protect these beneficial uses, the Basin Plan establishes water quality objectives (for bacterial, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharge to the bays/harbors, quality requirements for waste discharges (effluent water quality requirements), discharge prohibitions, and general provisions.

The SWRCB adopted a revised Water Quality Control Plan for Ocean Waters of California (Ocean Plan) on April 21, 2005. The Ocean Plan identifies the following beneficial uses of state ocean waters to be protected:

- Industrial water supply;
- Navigation;
- Aesthetic enjoyment;
- Water contact recreation;
- Non-contact water recreation;
- Fish migration;
- Mariculture;
- Marine habitat;
- Preservation and enhancement of areas of special biological significance;
- Preservation and enhancement of rare and endangered species;
- Fish spawning;
- Shellfish harvesting
- Ocean commercial and sport fishing;

The Ocean Plan establishes water quality objectives (for bacterial, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharge to the ocean, quality requirements for waste discharges (effluent water quality requirements), discharge prohibitions, and general provisions.



Beneficial uses of the bays and estuaries in the San Diego Region are similar to those of the Ocean Waters of the State. In order to protect the beneficial uses of the bays and estuaries, discharge specifications and receiving water quality limitations for some parameters, derived from the Ocean Plan, have been included in this Order for discharges to bays and estuaries (when open to the ocean and consisting of marine waters). If a lagoon or estuary is not open to the Pacific Ocean and consists of fresh water, discharges shall comply with the requirements established in this Order for discharges to inland surface waters.

This region has continuous and ephemeral rivers and streams, bays, estuaries, lagoons, and approximately 85 miles of coastline. No receiving waters covered under the terms and conditions of this Order have been designated an outstanding national resource water by the SWRCB. However, Heisler Park Ecological Reserve, located in coastal waters near the City of Laguna Beach, the San Diego-La Jolla Ecological Reserve, and the San Diego Marine Life Refuge, located in coastal waters near La Jolla, a community of the City of San Diego, have been designated an Area of Special Biological Significance (ASBS) by the SWRCB. The Water Quality Control Plan for Ocean Waters of California (Ocean Plan) contains the following prohibitions applicable to ASBSs:

"Waste shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas."

Order No. R9-2008-0002 prohibits the discharge of extraction waste to the above ASBSs

#### **H. SUMMARY OF EXISTING REQUIREMENTS AND SELF-MONITORING REPORT DATA**

Order No. 2001-96, which this WDR replaces, requires the Discharger not to exceed the Effluent Limitations for a number of constituents, and to monitor and report the concentration and mass of the constituents in their discharge. Significant changes occurred in the Effluent Limitation requirements for some constituents. Effluent Limitations under Order No. 2001-96 were developed using the CTR, while the SIP was used for this WDR.

##### **I. Compliance Summary (Not Applicable)**

##### **J. Planned Changes (Not Applicable)**

#### **II. Applicable Plans, Policies, and Regulations**

The requirements contained in this WDR are based on the requirements and authorities described in this section.

## A. Legal Authorities

This WDR is issued pursuant to CWA section 402 and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as an NPDES permit for point source discharges from groundwater extraction waste discharges to surface waters. This WDR also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

States may request authority to issue general NPDES permits pursuant to 40 CFR section 122.28. On June 8, 1989, the State Board submitted an application to the USEPA requesting revisions to its NPDES Program in accordance with 40 CFR 122.28, 123.62, and 403.10. The application included a request to add general permit authority to its approved NPDES Program. On September 22, 1989, the USEPA, Region 9, approved the State Board's request and granted authorization for the State to issue general NPDES permits.

## B. California Environmental Quality Act (CEQA)

This action to adopt a NPDES permit is exempt from the provisions of CEQA (Public Resources Code section 21100, et seq.) in accordance with CWC section 13389 for the following reasons: 1) A Discharger cannot obtain coverage under this WDR if pollutants in the discharge, cause, contribute, or have the reasonable potential to cause or contribute to a water quality standards violation; 2) The permit requires Dischargers to monitor and report the discharge to ensure the Dischargers will not cause a violation; and 3) The Regional Board's granting of the exceptions does not have the potential for causing significant adverse environmental effects. See California Code of Regulations, Title 14, section 15061(b)(3).

## C. State and Federal Regulations, Policies, and Plans

### 1. Water Quality Control Plan

On September 8, 1994, the Regional Board adopted a Water Quality Control Plan for the San Diego Region (hereinafter Basin Plan), that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Board Resolution No. 88-63 requires that, with certain exceptions, the Regional Board assigns the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plans.

### 2. National Toxics Rule (NTR) and California Toxics Rule (CTR)

USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995, and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.

3. **State Implementation Policy (SIP)**

On March 2, 2000, the State Board adopted the SIP, which became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP includes procedures for determining the need for and calculating Water Quality-Based Effluent Limitations (WQBELs), and requires Dischargers to submit data sufficient to do so. The State Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this WDR implement the SIP.

4. **Antidegradation Policy**

Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Board established California's antidegradation policy in State Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation policy where applicable. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. As discussed in detail in this Fact Sheet, the permitted discharge shall be consistent with the antidegradation provision of 40 CFR section 131.12 and State Board Resolution No. 68-16.

5. **Anti-Backsliding Requirements**

Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in the WDR are at least as stringent as the effluent limitations in the previous Order unless specified.

6. **Monitoring and Reporting Requirements**

Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Boards to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to implement Federal and State requirements. This MRP is provided in Attachment E.

#### **D. Impaired Water Bodies on CWA 303(d) List**

The federal Clean Water Act requires States to identify and make a list of surface water bodies that are polluted. These water bodies, referred to in law as "water quality limited segments," do not meet water quality standards even after discharges of wastes from point sources have been treated by the minimum required levels of pollution control technology. Wastewater treatment plants, a city's storm drain system, or a boat yard, are a few examples of point sources that discharge wastes to surface waters. States are required to compile the water bodies into a list, referred to as the "Clean Water Act Section 303(d) List of Water Quality Limited Segments" (303(d) List). States must also prioritize the water bodies on the list and develop action plans, called total maximum daily loads (TMDLs) to improve the water quality.

The State Board updated the 2004-2006 303(d) List for California on October 25, 2006, and EPA approved it on November 30, 2006.

There are approximately 100 impaired water bodies on the 303(d) List in the San Diego Region. Most TMDLs for water bodies within the San Diego Region are under development or have not been started. However, four TMDLs for the San Diego Region need only State Board approval to be complete, and three are already complete. Of the three completed TMDLs, two impact the water quality of San Diego Bay and the third impacts the water quality of Rainbow Creek.

#### **E. Other Plans, Policies and Regulations**

##### **Ocean Plan**

The State Board adopted the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) in 2005, it was approved by USEPA, and became effective on February 14, 2006. The Ocean Plan identifies the following beneficial uses of state ocean waters to be protected:

- a. Industrial water supply;
- b. Navigation;
- c. Aesthetic enjoyment;
- d. Water contact recreation;
- e. Non-contact water recreation;
- f. Ocean commercial and sport fishing;
- g. Mariculture;
- h. Preservation and enhancement of Areas of Special Biological Significance;
- i. Preservation and enhancement of rare and endangered species;
- j. Marine habitat;
- k. Fish migration;
- l. Fish spawning; and
- m. Shellfish harvesting.

In order to protect the above beneficial uses, the Ocean Plan establishes water quality objectives (for bacteriological, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the ocean, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions.

Limits derived from the Ocean Plan have been included in this WDR to protect beneficial uses of enclosed bays and estuaries because their beneficial uses are similar to those of the ocean waters of the State.

#### F. BASIS FOR WASTE DISCHARGE REQUIREMENTS

Section 402 of the federal Clean Water Act (CWA) gives the U.S. EPA the authority to issue NPDES permits for discharges into navigable waters and to prescribe conditions for such permits necessary to carry out the provisions of the CWA. In California, EPA has delegated this authority to the State of California.

The discharge of extracted groundwater threatens to cause or contribute to excursions above narrative water quality objectives as a result of the discharge of petroleum related compounds, metals, and organics. On May 26, 1989, the U.S. EPA enacted revisions to 40 CFR 122 (NPDES regulations). When a proposed discharge of a compound or chemical threatens to cause or contribute to an excursion above a State narrative water quality standard and a numeric water quality standard for the specific chemical has not been established, the NPDES revisions require the Regional Board to:

- a) Establish an effluent limitation using a proposed State water quality objective or standard or an explicit State policy or regulation interpreting its narrative water quality objective which will protect and maintain water quality and designated beneficial uses of the receiving water;
- b) Establish effluent limitations on a case-by-case basis, using EPA's water quality criteria published under 307(a) of the Federal Clean Water Act; or
- c) Establish effluent limitations on an indicator parameter for the pollutants of concern (State Board memorandum dated November 3, 1989).

Groundwater pollutant plumes are often complex mixtures of hundreds of petroleum related compounds (e.g. gasoline contains over 200 chemical compounds) which makes complete chemical analyses very expensive and sometimes impracticable or impossible due to sample matrix interferences, constituent masking, or the lack of standard analytical techniques. Since water quality criteria for many of the petroleum hydrocarbon compounds have not been proposed or established by the State or EPA, the permit will require monitoring groundwater discharged using "indicator constituents" for the detection and evaluation of complex mixtures of petroleum related compounds such as gasoline and solvents. The indicator constituents used for evaluating compliance with the narrative water quality criteria in the permit for discharges of gasoline related products are benzene, ethylbenzene, toluene, xylene, and total petroleum

hydrocarbons, since it is believed that fuels have been adequately studied to justify limiting the analysis to these compounds.

On June 8, 1989, the SWRCB submitted an application to the U.S. EPA requesting revisions to its NPDES program in accordance with 40 CFR 123.62 and 403.10. The application included a request to add general permit authority to its approved NPDES program. States may request authority to issue general permits pursuant to 40 CFR 122.28. On September 22, 1989, the EPA, Region IX, approved the SWRCB's request and granted authorization for the State's issuance of general NPDES permits.

40 CFR 122.28 provides for the issuance of general permits to regulate discharges of waste which result from similar operations, are the same type of waste, require the same effluent limitations, require similar monitoring, and are more appropriately regulated under a general permit rather than individual permits.

In order to protect the beneficial uses of groundwaters and receiving waters in the region as a result of escalating numbers of groundwater extraction waste discharges, new permanent groundwater extraction waste discharges will be considered for enrollment on a case-by-case basis. The regulation of discharges from new permanent groundwater extraction operations to receiving waters will reduce the waste of groundwater as intended by Article X of the California Constitution and Section 275 of the California Water Code, and may reduce the potential number of new permanent discharges as intended by the federal Clean Water Act (Section 101(a)(1)) and the Water Quality Control Policy for Enclosed Bays and Estuaries of California.

The practice of permanent groundwater extraction for the purpose of protecting underground parking or other structures and the subsequent discharge of the groundwaters, without using the groundwaters to the "fullest extent to which they are capable," as required by the California Constitution, is an unreasonable use of such waters, if the waters have designated beneficial uses. Article X, Section 2, of the California Constitution requires that "water resources of the State be put to beneficial use to the fullest extent of which they are capable and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare." Water Code Section 275 states, "The department and board shall take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state."

On March 2, 2000, the SWRCB, in Resolution No. 2000-15, adopted a Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Policy). The Policy implements the provisions promulgated by the U.S. Environmental Protection Agency (U.S. EPA) in the California Toxics Rule (CTR). Criteria for 126 priority pollutants are established by the CTR.

U.S. EPA promulgated this rule to fill a gap in California water quality standards that was created in 1994 when a State court overturned the State's water quality control plans containing water quality criteria for priority toxic pollutants. The Federal criteria are legally applicable in the State of California for inland surface waters, enclosed bays and estuaries for all purposes and programs under the Clean Water Act.

The Policy was effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through the National Toxics Rule (NTR) and to the priority pollutant objectives established by Regional Boards in their water quality control plans (basin plans).

The U.S. EPA promulgated the final California Toxic Rule (CTR) on May 18, 2000, as required by Section 303(c)(2)(B) of the federal Clean Water Act. The CTR regulations, codified in 40 CFR 131.38, establish numeric criteria for water quality standards for priority toxic pollutants for the State of California.

The Policy establishes:

- a) implementation provisions for priority pollutant criteria promulgated by the U.S. EPA through the National Toxic Rule (NTR) and the CTR, and for priority pollutant objectives established in the Basin Plan;
- b) monitoring requirements for 2,3,7,8-TCDD (tetrachlorodibenzo-p-dioxin) equivalents; and
- c) Chronic toxicity control provisions.

Pursuant to Section 5.3 of the Policy, the Regional Board may, after compliance with the California Environmental Quality Act (CEQA), allow short-term or seasonal exceptions from meeting the priority pollutant criteria/objectives if determined to be necessary to implement control measures either:

- a) For resource or pest management (i.e., vector or weed control, pest eradication, or fishery management) conducted by public entities to fulfill statutory requirements, including, but not limited for, those in the California Fish and Game, Food and Agriculture, Health and Safety, and Harbors and Navigation codes; or
- b) Regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. Such categorical exceptions may also be granted for draining municipal storm water conveyances for cleaning or maintenance, or for draining water treatment facilities for cleaning or maintenance.

Section 5.3 of the Policy states that, where site-specific conditions in individual water bodies or watersheds differ sufficiently from statewide conditions and those differences cannot be addressed through other provisions of this policy the SWRCB

may, in compliance with the California Environmental Quality Act (CEQA), subsequent to a public hearing, and with the concurrence of the U.S. Environmental Protection Agency, grant an exception to meeting a priority pollutant criterion/objective or any other provision of this Policy where the State Board determines:

- a) The exception will not compromise protection of enclosed bay, estuarine, and inland surface waters for beneficial uses; and
- b) The public interest will be served.

Section 402(a)(1) of the Clean Water Act authorizes the issuance of best available technology effluent limitations in NPDES permits using best professional judgement. Using best professional judgement, best available technology economically achievable for the removal of volatile and semi-volatile organic compounds, and analytical practical quantitation levels is the basis for effluent limitations, for these compounds, in the Discharge Specifications of the Order. Thus, best available technology economically achievable for the removal of organic compounds is the basis for effluent limitations for xylene and other volatile hydrocarbons, and base/neutral compounds (not included in 40 CFR 131.38).

Water Quality Based Effluent Discharge Specifications (limits) were established for this groundwater extraction waste discharge permit, using 40 CFR 131.38 (Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California), and the State's Implementation Policy. Water Quality Based Effluent Discharge Limits do not apply to discharges of extracted groundwater to the surf zone.

In general, there are two accepted technologies in use for the removal of synthetic organic compounds from water: aeration and adsorption. Removal efficiencies of volatile organic compounds through aeration processes can be estimated based on each compound's Henry's Law Coefficient (increasing coefficients indicate increasing volatility). Benzene is relatively soluble in water when compared to other fuel constituents and solvents. Any compound which has a Henry's Law coefficient greater than that of benzene will theoretically volatilize faster than benzene (assuming molecular or chemical interactions are nonexistent or minimized). Most of the compounds associated with fuel products and solvents commonly found in contaminated groundwater have Henry's Law Coefficients greater than that of benzene and will be efficiently removed through aeration if benzene is removed. The general consensus in the literature is that a 99 percent removal efficiency of volatile compounds with similar concentrations may be achieved through aeration processes. Based on best professional judgement, if benzene is removed from groundwater to levels approaching detection limits (practical quantitation level), other volatile organic compounds of concern (e.g., tetrachloroethylene, trichloroethylene, carbon tetrachloride, etc.) will be removed from the discharged groundwater as well.



Organic compounds which are not removed from groundwaters through aeration processes may be removed through adsorption processes (e.g., granular activated carbon). When properly designed and operated, most granular activated carbon systems can lower the concentration of synthetic organic contaminants to below detection limits.

In general, most synthetic organic contaminants can be removed from groundwaters using the aeration or adsorption processes or a combination thereof.

Establishing effluent limitations in the practical quantitation limit range (1 to 5  $\mu$ g/L) and monitoring requirements for BTEX as indicators of fuels, 40 CFR 136 listed volatile compounds as indicators of solvents, and base/neutral compounds as indicators of diesel product, will, based on best professional judgement, ensure that compounds of concern are not discharged in levels which will cause excursions from narrative water quality criteria or objectives.

On January 1, 1998, Senate Bill (SB) 521 was passed. SB521 adds language, applicable to leaking underground storage tanks, to the Health & Safety Code as follows: "Section 25299.37.1. No closure letter pursuant to this chapter shall be issued unless the soil or groundwater, or both, where applicable, at the site have been tested for Methyl Tertiary Butyl Ether (MTBE) and the results of that testing are known to the Regional Board." Subsequently, on February 20, 1998, the San Diego Regional Board, Site Mitigation & Cleanup Unit, issued written notification to interested parties of Mandatory MTBE Sampling For Underground Storage Tank (UST) Site Closures-Senate Bill (SB) 521. The February 20, 1998, notification specifies that "For ground water impacted sites or soil sites that may threaten ground water, both soil and ground water sampling and analysis for MTBE will be required."

The Porter-Cologne Water Quality Control Act (January 1, 2000), Section 13272.1 and Section 13285, address discharges of MTBE. The California Department of Health Services (DHS) last update (March 9, 2000) of California's Maximum Contaminant Levels (MCLs) for MTBE states the following:

As established by the DHS, the primary MCL is 13  $\mu$ g/L for MTBE and the secondary MCL is 5  $\mu$ g/L.

The Order requires that groundwater discharged to bays and estuaries must not contain pollutants in excess of applicable receiving water quality objectives contained in 40 CFR 131.38 (Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California), or effluent limitations based on achievable concentrations using best available technology (BAT), whichever results in a lower effluent concentration. Effluent limitations based on BAT are equal to or less than the practical quantitation level. Since the assumed initial dilution factor for the discharge is zero, a discharge could not cause an excursion from numeric receiving water quality objectives for Tables 1 and 2 (Groundwater Extraction Discharges to Bays and Harbors, and Groundwater Extraction Waste Discharges to Lagoons/Estuaries), if the discharge is in compliance with the effluent limitations contained in the Order. Likewise,

discharges to the surf zone cannot cause excursions from water quality objectives based on the preceding, and assuming that the dilution factor will always be greater than three.

For discharges to inland surface waters, effluent limitations are based on the EPA water quality criteria for the protection of aquatic species, the EPA water quality criteria for the protection of human health, effluent concentrations achievable using best available technology, 40 CFR 131.38 (Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California), or, in the cases where the receiving water is designated potable or municipal supply waters, maximum contaminant levels for municipal waters established by the California Department of Health Services. Since the assumed initial dilution factor for the discharge is zero and a mixing zone is not allowed, a discharge could not cause an excursion from numeric receiving water quality objectives if the discharge is in compliance with the effluent limitations contained in the Order.

No evidence that groundwaters in the region contain biocides, dioxins, or radiation has been found to date. However, discharges of pesticides in detectable concentrations to inland surface waters are prohibited by the Comprehensive Water Quality Control Plan Report, San Diego Basin (9) (Basin Plan), and by the Order.

In the adoption of waste discharge requirements and effluent limitations to protect the beneficial uses of waters of the State, Section 1300 et seq., of the California Water Code, authorizes the use of relevant water quality objectives or other criteria in the absence of numerical effluent concentration limitations in the Bays and Estuaries Policy.

Compliance with effluent limitations shall be determined as follows (pursuant to 40 CFR – 131.38):

- a) Dischargers shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).
- b) Dischargers shall be required to conduct a Pollutant Minimization Program (PMP) when there is evidence (e.g., sample results reported as “Detected, but Not Quantified” (DNQ) when the effluent limitation is less than the Method Detection Limit (MDL), sample results from analytical methods more sensitive than those methods included in the permit, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that the priority pollutant is present in the effluent above an effluent limitation and either:
  - 1) A sample result is reported as DNQ and the effluent limitation is less than the reported ML; or

- 2) A sample result is reported as Non-Detect (ND) and the effluent limitation is less than the MDL.

When determining compliance with an Average Monthly Effluent Limitation (AMEL) and more than one sample result is available in a month, the discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

- a) The data set shall be ranked from low to high, reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- b) The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

If a sample result, or the arithmetic mean or median of multiple sample results, is below the reported ML, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the discharger conducts a PMP, the discharger shall not be deemed out of compliance.

### **III. Rationale For Effluent Limitations and Discharge Specifications**

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. Effluent limitations are based on the following principles:

- A. 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards;
- B. 40 CFR section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality criteria have not been established, three options exist to protect water quality: 1) 40 CFR section 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); 2) proposed state criteria or a state policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established;

- C. Any discharge of untreated groundwater to surface water in the San Diego Region threatens to cause or contribute to excursions above narrative water quality objectives contained in the Basin Plan as a result of the potential discharge of petroleum related compounds, solvents, and metals.

On May 26, 1989, USEPA enacted revisions to NPDES program regulations (40 CFR 122). When a proposed discharge of a compound or chemical threatens to cause or contribute to an excursion above a State narrative water quality standard and a numeric water quality standard for the specific chemical has not been established, the NPDES program regulations require the Regional Board to do the following: 1) Establish effluent limitations using a proposed State water quality objective or standard, or an explicit State policy or regulation interpreting its narrative water quality objective which will protect and maintain water quality and designated beneficial uses of the receiving water; 2) Establish effluent limitations on a case-by-case basis, using USEPA's water quality criteria published under CWA section 307(a); or 3) Establish effluent limitations on an indicator parameter for the pollutants of concern; and

- D. 40 CFR section 122.44(l) requires that when a permit is renewed or reissued, effluent limitations must be at least as stringent as the effluent limitations in the previous permit. Since this permit is a renewal of a previous permit, anti-backsliding is applicable and the following pollutants are included:

|                              |                                      |
|------------------------------|--------------------------------------|
| Settleable Solids            | Phenolic Compounds (non-chlorinated) |
| Total Suspended Solids       | Chlorinated Phenolics                |
| Hydrogen Sulfide             | 1,1,2,2-tetrachlorethane (PCA)       |
| Total Residual Chlorine      | 1,1,1-trichloroethane (TCA)          |
| pH                           | 1,1,2-trichloroethane (TCA)          |
| Benzene                      | 1,2-dichloroethane                   |
| Ethylbenzene                 | Tetrachloroethylene (PCE)            |
| Toluene                      | Trichloroethylene (TCE)              |
| Xylene                       | Vinyl chloride                       |
| Total Petroleum Hydrocarbons | Carbon tetrachloride                 |
| Arsenic                      | Base/Neutral Organic                 |
| Cadmium                      | Compounds                            |
| Chromium (hexavalent)        | Acute Toxicity                       |
| Copper                       | Chronic Toxicity                     |
| Lead                         | Tributyltin (TBT)                    |
| Mercury                      | Total Coliform                       |
| Nickel                       | Fecal Coliform                       |
| Silver                       | Dissolved Oxygen (DO)                |
| Zinc                         |                                      |
| Cyanide                      |                                      |

- E. Methyl Tertiary-Butyl Ether (MTBE), is a chemical compound that is manufactured by the chemical reaction of methanol and isobutylene.

MTBE is produced in very large quantities (over 200,000 barrels per day in the U.S. in 1999) and is almost exclusively used as a fuel additive in motor gasoline. It is one of a group of chemicals commonly known as "oxygenates" because they raise the oxygen content of gasoline. At room temperature, MTBE is a volatile, flammable and colorless liquid that dissolves rather easily in water.

Because MTBE dissolves easily in water and does not "cling" to soil very well, it migrates faster and farther in the ground than other gasoline components, thus making it more likely to migrate to groundwater extraction wells. MTBE does not degrade (breakdown) easily and is difficult and costly to remove from groundwater.

On January 1, 1998, Senate Bill (SB) 521 was passed. SB521 adds language to the Health & Safety Code which is applicable to leaking underground storage tanks as follows: "Section 25299.37.1. No closure letter pursuant to this chapter shall be issued unless the soil or groundwater, or both, where applicable, at the site have been tested for Methyl Tertiary Butyl Ether (MTBE) and the results of that testing are known to the Regional Board." Subsequently, on February 20, 1998, the Regional Board, Site Mitigation & Cleanup Unit, issued written notification to interested parties of Mandatory MTBE Sampling For Underground Storage Tank (UST) Site Closures-Senate Bill (SB) 521. The February 20, 1998, notification specifies that "For ground water impacted sites or soil sites that may threaten ground water, both soil and ground water sampling and analysis for MTBE will be required."

Sections 13272.1 and Section 13285 of the CWC address discharges of MTBE. The California Department of Health Services (DHS) adopted limits for Maximum Contaminant Levels for MTBE. The Primary MCL of 13 µg/L was adopted by DHS on May 17, 2000. The Secondary MCL (for taste and odor not health affects) of 5 µg/L was adopted on January 7, 1999. The UST program uses the more conservative secondary MCL of 5 µg/L.

#### F. Discharge Prohibitions

Discharges under this WDR are required to be nontoxic. Toxicity is the adverse response of organisms to chemicals or physical agents. This prohibition is based on the Basin Plan, which require that all waters be maintained free of toxic substances in concentrations that are lethal or produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. The Basin Plan also requires waters to be free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, or animal life. This objective applies regardless of whether

the toxicity is caused by a single substance or the interactive effect of multiple substances.

Mass emission rate limitations will be determined using the discharge flowrate and effluent concentration limitations specified in this WDR; therefore, the daily maximum discharge flowrate limitation for each discharge will be specified in the discharge Notice of Enrollment from the Regional Board. The discharge flowrate will be designated as the maximum discharge flowrate and the Discharger shall be prohibited from discharging in excess of the maximum discharge flowrate.

1. The discharge of groundwater to surface waters is prohibited unless authorized, exempted, or issued an individual NPDES permit by the Regional Board.
2. The discharge of wastes to areas designated by the SWRCB, and recommended by the Regional Board, as areas of special biological significance is prohibited. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.
3. The discharge of groundwater extraction waste to surface waters from permanent groundwater extraction operations in basins with designated beneficial uses of industrial, agricultural, or municipal and domestic supply are prohibited unless such extracted groundwater (not used beneficially) is used beneficially (Application Requirements, Section F.17, and F.18). If the Enrollee of such extracted groundwater wishes to discharge to surface waters, it shall be the responsibility of the Enrollee to obtain an individual NPDES Permit for the discharge.
4. The discharge of groundwater extraction waste to enclosed bays, harbors, lagoons, and estuaries, or tributaries thereto, is prohibited unless the Enrollee demonstrates to the satisfaction of the Regional Board that alternative disposal sites (e.g., surf zone) are not practicable as required in Application Requirements, Sections F.17, and F.18.
5. The discharge of groundwater extraction waste to any surface water from a groundwater extraction project after the date of completion of construction of structures requiring groundwater extraction, or from a groundwater remediation operation after the date the groundwater has been remediated to the satisfaction of the Regional Board, is prohibited.
6. The discharge of groundwater in excess of the flowrate specified in each Enrollee's Notice of Enrollment is prohibited unless the

Enrollee obtains a revised discharge Notice of Enrollment authorizing an increased flowrate.

7. No individual pesticide or combination of pesticides shall be present in the water column, sediments, or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Water designated for use as domestic or municipal supply (MUN) (drinking water) shall not contain concentrations of pesticides in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of Section 64444 (Organic Chemicals). (See Basin Plan Chapter 3-13).

8. Compliance with the waste discharge prohibitions contained in the Basin Plan is a condition of this Order.
9. The discharge of groundwater extraction waste to a storm water conveyance system without notifying and receiving authorization from the agency having jurisdiction over the storm water conveyance system is prohibited.
10. The discharge of wastes tributary or directly to areas designated as being of special biological significance by the SWRCB is prohibited. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.

G. Technology-Based Effluent Limitations (TBELs)

1. Scope and Authority

The CWA requires that TBELs be established based on several levels of controls:

Best Practicable Treatment Control Technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. The BPT standards apply to toxic, conventional, and nonconventional pollutants.

Best Available Technology Economically Achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. The BAT standards apply to toxic and nonconventional pollutants.

Best Conventional Pollutant Control Technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

New Source Performance Standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop Effluent Limitations, Guidelines and Standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR section 125.3 of the NPDES regulations authorize the use of Best Professional Judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR section 125.3.

## 2. Applicable Technology-Based Effluent Limitations

The USEPA has not developed numeric Technology-Based effluent limitations for pollutants in discharges from groundwater extraction.

## H. Water Quality-Based Effluent Limitations (WQBELs)

### 1. Scope and Authority

As specified in 40 CFR section 122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, achieve applicable water quality objectives and criteria contained in state plans and policies, and meet water quality criteria in the CTR and NTR.

### 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The designated beneficial uses of surface waters throughout the State may include municipal, domestic, industrial, and agricultural supply; water contact and non-contact recreation; navigation; groundwater recharge and freshwater replenishment; hydropower generation; wildlife habitat; cold



freshwater and warm freshwater habitat; fish migration and fish spawning; marine habitat; estuarine habitat; shellfish harvesting; ocean commercial and sport fishing; areas of special biological significance; and preservation of rare and endangered species. To the extent that the Basin Plan designates additional or different beneficial uses, the Basin Plan shall apply.

### 3. Determining the Need for WQBELs

All applicable provisions of sections 301 and 402 of the CWA must be met for NPDES permits for discharges to surface waters. These provisions require controls of pollutant discharges that utilize BAT and BCT to reduce pollutant and any more stringent controls necessary to meet water quality standards.

As specified in the SIP, the Regional Board shall conduct an analysis for each priority pollutant with applicable criterion or objective to determine if a water quality-based effluent limitation is required.

Data are unavailable to conduct an analysis because a WDR as a General Permit, does not require a Report of Waste Discharge. Therefore, the discharger shall conduct an initial sample based on flow to determine the requirements.

#### Reasonable Potential Analysis (RPA)

In order to determine what to sample for and what frequency, an initial set of data is required.

If the discharger proposes to discharge less than 100,000 gallons per day, then the discharger shall initially conduct Monitoring Program A (sample for the entire constituents listed in III.D. and MTBE).

However if the discharger proposes to discharge 100,000 gallons per day or more, then the discharger shall initially conduct Monitoring Program B (sample the entire constituents listed in III.D., MTBE, and all 126 priority pollutants).

Based on the initial monitoring program if the discharge does not require treatment to meet the discharge specifications of this WDR, then the discharger will only need to conduct Monitoring Program A (if discharging less than 100,000 gallons per day) or Monitoring Program B (if discharging 100,000 gallons per day or more) once per year. This will provide data to identify reasonable potential for future effluent limits.

If the discharge will require treatment prior to discharge, then in addition to the once per year monitoring required listed above, the discharger will also monitor for all the constituents listed in the discharge specification with

effluent limits at the frequency required in the Monitoring and Reporting Program stated in Attachment E because of the reasonable potential of exceeding the effluent limits in the discharge specifications of this WDR.

If there are any contaminated sites within the radius of influence of the groundwater extraction activities, then the constituent of concern will be monitored at the frequency required in the Monitoring and Reporting Program stated in Attachment E because of the reasonable potential of exceeding the effluent limits in the discharge specifications of this WDR. If the constituent of concern is not listed in the Monitoring and Reporting Program stated in Attachment E then a monitoring and reporting frequency will be stated in the Notice of Enrollment.

Table summarizing effluent limits and monitoring

| DISCHARGE                                | EFFLUENT LIMITS | MONITORING PROGRAM   |
|--|-----------------|--|
| < 100,000                                |                 | <ul style="list-style-type: none"><li>• Program A Annual</li></ul>   |
| >= 100,000                               |                 | <ul style="list-style-type: none"><li>• Program B Annual</li></ul>   |
| Treatment                                | Yes             | <ul style="list-style-type: none"><li>• Monitoring and Reporting Program in Attachment E</li></ul>                                   |
| Contaminated Site in Radius of Influence |                 | <ul style="list-style-type: none"><li>• Monitor and Report constituent(s) of concern as stated in the Notice of Enrollment</li></ul> |

#### 4. WQBEL Calculations

The Average Monthly Effluent and Maximum Daily Effluent WQBELs were calculated using a statistical approach with the following considerations and assumptions:

No dilution credit is considered for the discharge. Therefore, the discharge must comply with the Water Quality Objective at the point of discharge.

The WQBEL based on the CTR were implemented using the procedure list in the SIP. The procedure is listed below with copper as the example.

CTR/SIP calculations - Copper Example:

Criteria for Priority Toxic Pollutant in the State of California is described in the CTR table listed in 40 CFR 131.38.

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| A                              |               | B<br>Freshwater                                  |   | C<br>Saltwater                                   |   | D<br>Human Health<br>(10 <sup>-6</sup> risk for carcinogens)<br>For consumption of: |                                   |
|--------------------------------|---------------|--|---|--|---|---|-----------------------------------|
| # Compound                     | CAS<br>Number | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>B1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>B2 | Criterion<br>Maximum<br>Conc. <sup>a</sup><br>C1 | Criterion<br>Continuous<br>Conc. <sup>a</sup><br>C2 | Water &<br>Organisms<br>(µg/L)<br>D1  | Organisms<br>Only<br>(µg/L)<br>D2 |
| 1. Antimony                    | 7440350       |  |   |  |   | 14 a,s  | 4300 a,1                          |
| 2. Arsenic <sup>a</sup>        | 7440382       | 340 l,m,w  | 150 l,m,w   | 69 l,m   | 36 l,m  |   |                                   |
| 3. Beryllium                   | 7440417       |  |   |  |   | n   | n                                 |
| 4. Cadmium <sup>b</sup>        | 7440439       | 4.3 e,i,m,w,x                                    | 2.2 e,i,m,w   | 42 l,m   | 9.3 l,m   | n   | n                                 |
| 5a. Chromium (III)             | 16065831      | 550 e,i,m,o                                      | 180 e,i,m,o   |  |   | n   | n                                 |
| 5b. Chromium (VI) <sup>b</sup> | 18540299      | 16 l,m,w   | 11 l,m,w  | 1100 l,m   | 50 l,m  | n   | n                                 |
| 6. Copper <sup>b</sup>         | 7440508       | 13 e,i,m,w,x                                     | 9.0 e,i,m,w   | 4.8 l,m  | 3.1 l,m   | 1300  |                                   |

Saltwater criterion maximum concentration (CMC) = 4.8 µg/L

Saltwater criterion continuous concentration (CCC) = 3.1 µg/L

These criteria are expressed in terms of the dissolved fraction of the metal in the water column. [See footnote "m" to Table in paragraph (b)(1) of 40 CFR 131.38]

40 CFR 122.45(c) requires that this WDR include effluent limitations as a total recoverable concentration.

The SIP requires that if it is necessary to express a dissolved metal or selenium value as total recoverable and a site-specific translator has not yet been developed, the Regional Board shall use the applicable conversion factor from 40 CFR 131.38.

The term "Conversion Factor" (CF) represents the recommended conversion factor for converting a metal criterion expressed as the total recoverable fraction in the water column to a criterion expressed as the dissolved fraction in the water column [See note to Table 2 of Paragraph (b)(2) to 40 CFR 131.38]

Total recoverable concentration \* CF = Dissolved concentration criterion

or

Total recoverable concentration = Dissolved concentration criterion / CF

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(iv) Table 2 to paragraph (b)(2) of this section:

| Metal                | Conversion factor (CF) for freshwater acute criteria | CF for freshwater chronic criteria | CF for saltwater acute criteria | CF* for saltwater chronic criteria |
|----------------------|--|------------------------------------|---------------------------------|------------------------------------|
| Antimony .....       | ( <sup>d</sup> )                                     | ( <sup>d</sup> )                   | ( <sup>d</sup> )                | ( <sup>d</sup> )                   |
| Arsenic .....        | 1.000  | 1.000                              | 1.000                           | 1.000                              |
| Beryllium .....      | ( <sup>d</sup> )                                     | ( <sup>d</sup> )                   | ( <sup>d</sup> )                | ( <sup>d</sup> )                   |
| Cadmium .....        | *0.944   | *0.909                             | 0.994                           | 0.994                              |
| Chromium (III) ..... | 0.316  | 0.860                              | ( <sup>d</sup> )                | ( <sup>d</sup> )                   |
| Chromium (VI) .....  | 0.982  | 0.962                              | 0.993                           | 0.993                              |
| Copper .....         | 0.960  | 0.960                              | 0.83                            | 0.83                               |

CF for copper = 0.83

Total recoverable concentrations for copper:

4.8 µg/L dissolved (CMC) / 0.83 (CF) = 5.8 µg/L total recoverable for CMC

3.1 µg/L dissolved (CCC) / 0.83 (CF) = 3.7 µg/L total recoverable for CCC

Effluent variability multiplier and Coefficient of Variation (CV)

For each concentration based on an aquatic life criterion, the long-term average (LTA) is calculated by multiplying the concentration with a factor that adjusts for effluent variability. The multiplier can be found in Table 1 of the SIP. Since this is a WDR without existing data points, the number of effluent data points is less than ten; the CV shall be set equal to 0.6 per the SIP.

Table 1. Effluent Concentration Allowance (ECA)  
Multipliers for Calculating Long-Term Averages (LTAs)

| Coefficient Of Variation (CV) | Acute Multiplier                                   | Chronic Multiplier                                 |
|-------------------------------|--|--|
|                               | 99 <sup>th</sup> Percentile Occurrence Probability | 99 <sup>th</sup> Percentile Occurrence Probability |
| 0.1                           | 0.797  | 0.891  |
| 0.2                           | 0.643  | 0.797  |
| 0.3                           | 0.527  | 0.715  |
| 0.4                           | 0.440  | 0.643  |
| 0.5                           | 0.373  | 0.581  |
| 0.6                           | 0.321  | 0.527  |

Therefore, from Table 1 of the SIP, the effluent variability multiplier will be as follows:

Acute Multiplier = 0.321

Chronic Multiplier = 0.527

The long-term average (LTA) is calculated by multiplying the total recoverable concentrations for copper with the acute and chronic multipliers:

$$\begin{aligned}\text{LTA acute} &= 5.8 \mu\text{g/L} * 0.321 = 1.9 \mu\text{g/L} \\ \text{LTA chronic} &= 3.7 \mu\text{g/L} * 0.527 = 2.0 \mu\text{g/L}\end{aligned}$$

The MDEL and AMEL will be based on the most limiting of the acute and chronic LTA, in the case for copper it will be LTA acute of 1.9  $\mu\text{g/L}$ .

Water quality-based effluent limits are calculated by multiplying the most limiting LTA with a factor (multiplier) that adjusts for the averaging periods and exceedance frequencies of the criteria and the effluent limitations. The multiplier can be found in Table 2 of the SIP. Since this is a WDR without existing data points, the CV will be set equal to 0.6 and since sampling frequency is four times a month or less, n shall be set equal to 4 per SIP (n=4).

Table 2. Long-Term Average (LTA) Multipliers for Calculating Effluent Limitations

| Coefficient of Variation | MDEL Multiplier                                    | AMEL Multiplier                                    |       |        | MDEL/AMEL Multiplier  |       |        |
|--------------------------|--|--|-------|--------|---|-------|--------|
|                          | 99 <sup>th</sup> Percentile Occurrence Probability | 95 <sup>th</sup> Percentile Occurrence Probability |       |        | MDEL = 99 <sup>th</sup> Percentile<br>AMEL = 95 <sup>th</sup> Percentile Occurrence Probability |       |        |
| (CV)                     |  | n = 4  | n = 8 | n = 30 | n = 4   | n = 8 | n = 30 |
| 0.1                      | 1.25   | 1.08   | 1.06  | 1.03   | 1.16  | 1.18  | 1.22   |
| 0.2                      | 1.55   | 1.17   | 1.12  | 1.06   | 1.33  | 1.39  | 1.46   |
| 0.3                      | 1.90   | 1.26   | 1.18  | 1.09   | 1.50  | 1.60  | 1.74   |
| 0.4                      | 2.27   | 1.36   | 1.25  | 1.12   | 1.67  | 1.82  | 2.02   |
| 0.5                      | 2.68   | 1.45   | 1.31  | 1.16   | 1.84  | 2.04  | 2.32   |
| 0.6                      | 3.11   | 1.55   | 1.38  | 1.19   | 2.01  | 2.25  | 2.62   |

Therefore, from Table 2 of the SIP, the LTA multipliers will be as follows:

$$\text{MDEL Multiplier} = 3.11$$

$$\text{AMEL Multiplier} = 1.55$$

The MDEL and AMEL limits are calculated by multiplying the LTA with an LTA multiplier for each limit:

$$\text{Maximum Daily Effluent Limit (MDEL)} = 1.9 \mu\text{g/L} * 3.11 = 5.8 \mu\text{g/L}$$

$$\text{Average Monthly Effluent Limit (AMEL)} = 1.9 \mu\text{g/L} * 1.55 = 2.9 \mu\text{g/L}$$

#### I. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) tests measure the aggregate toxic effect of a mixture of pollutants that may be present in a waste stream and provides information on potential toxic impacts to receiving waters from the

discharge of wastes. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach provides a means of assessing compliance with the narrative toxicity water quality objective for aquatic life protection of the Basin Plan while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and development.

The SIP requires that a Toxicity Reduction Evaluation (TRE) be conducted if a discharge causes or contributes to chronic toxicity in a receiving water body. This WDR requires the Discharger to periodically monitor the toxicity of its discharge and to develop a TRE Workplan if the toxicity effluent limitations are exceeded.

#### J. Anti-Backsliding Effluent Limitations

Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. The following limits designated with AB in the Final Effluent Limitations table below have the same limit as the previous permit.

#### K. Final Effluent Limitations

### Summary of Water Quality-Based Effluent Limitations Discharge Point

#### Summary of Water Quality-based Effluent Limitations Table

##### Mass Limits

All permit limitations, standards or prohibitions shall be expressed in terms of mass except for pH, or other pollutants which cannot appropriately be expressed by mass or under certain circumstances including "when applicable standards and limitations are expressed in terms of other units of measurement." (40 CFR § 122.45(f)(1)). Therefore, all concentration limits stated above except for Settleable Solids, Acute Toxicity, Chronic Toxicity, Total Coliform, Fecal Coliform, pH, and Dissolved Oxygen shall also have a mass limit based on its concentration limit times the discharge flow limit in the Notice of Enrollment expressed in pounds per day (lbs/d) as shown in the equations below:

Concentration Limit \* Flow Limit \* Conversion Factor = Mass Limit

(mg/l) \* (MGD) \* 8.34 [lb\*L/(Million Gallons\*mg)] = lbs/day

(µg/l) \* (MGD) \* 0.00834 [lb\*L/(Million Gallons\*µg)] = lbs/day

(mg/l) \* (gpd) \* 0.00000834 [lb\*L/(Gallons\*mg)] = lbs/day

(µg/l) \* (gpd) \* 0.0000000834 [lb\*L/(Million Gallons\*µg)] = lbs/day

## B. DISCHARGE SPECIFICATIONS

### 1. DISCHARGES TO BAYS AND HARBORS

The discharge of groundwater extraction waste to Mission Bay, Oceanside Harbor, Del Mar Boat Basin, or Dana Point Harbor shall not contain pollutants in excess of the following effluent limitations:

#### General / Inorganic / Biological

| Parameter               | Units      | Effluent Limitations                                  |                   |                   |                       |                 |
|-------------------------|------------|---|-------------------|-------------------|-----------------------|-----------------|
|                         |            | AMEL  | AWEL              | MDEL              | Instantaneous Maximum | 6-Month Median  |
| Settleable Solids       | ml/L       | 1.0 <sup>OP</sup>                                     | 1.5 <sup>OP</sup> | -                 | 3.0 <sup>OP</sup>     | -               |
| Total Suspended Solids  | mg/L       | 30 <sup>AB</sup>                                      | -                 | -                 | 50 <sup>AB</sup>      | -               |
| Hydrogen Sulfide        | µg/L       | 2 <sup>AB</sup>                                       | -                 | 4 <sup>AB</sup>   | 10 <sup>AB</sup>      | -               |
| Total Residual Chlorine | µg/L       | -   | -                 | 8 <sup>OP</sup>   | 60 <sup>OP</sup>      | 2 <sup>OP</sup> |
| Acute Toxicity          | Tua        |   |                   | 0.3 <sup>OP</sup> |                       |                 |
| Chronic Toxicity        | Tuc        |   |                   | 1.0 <sup>OP</sup> |                       |                 |
| Total Coliform          | MPN/100 ml |   |                   |                   | 1000.0 <sup>AB</sup>  |                 |
| Fecal Coliform          | MPN/100 ml |   |                   |                   | 200.0 <sup>AB</sup>   |                 |
| pH                      | Units      | Within limit of 6.0 to 9.0 at all times <sup>OP</sup> |                   |                   |                       |                 |

| Parameter             | Units | Effluent Limitations |      |      |                       |                |
|-----------------------|-------|----------------------|------|------|-----------------------|----------------|
|                       |       | AMEL                 | AWEL | MDEL | Instantaneous Minimum | 6-Month Median |
| Dissolved Oxygen (DO) | mg/L  |                      |      |      | > 5.0 <sup>AB</sup>   |                |

#### Petroleum

| Parameter    | Units | Effluent Limitations |      |      |                       |                |
|--------------|-------|----------------------|------|------|-----------------------|----------------|
|              |       | AMEL                 | AWEL | MDEL | Instantaneous Maximum | 6-Month Median |
| MTBE         | µg/L  |                      |      |      | 5 <sup>DHS</sup>      |                |
| Benzene      | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Ethylbenzene | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Toluene      | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |
| Xylene       | µg/L  | -                    | -    | -    | 5 <sup>AB</sup>       | -              |

| Parameter                    | Units | Effluent Limitations |      |      |                       |                |
|------------------------------|-------|----------------------|------|------|-----------------------|----------------|
|                              |       | AMEL                 | AWEL | MDEL | Instantaneous Maximum | 6-Month Median |
| Total Petroleum Hydrocarbons | mg/L  | -                    | -    | -    | 0.5 <sup>AB</sup>     | -              |

#### Metals

| Parameter         | Units | Effluent Limitations |      |                       |                |
|-------------------|-------|----------------------|------|-----------------------|----------------|
|                   |       | AMEL                 | MDEL | Instantaneous Maximum | 6-Month Median |
| Tributyltin (TBT) | µg/L  | 0.0014 <sup>OP</sup> |      |                       |                |

#### Organics

| Parameter                            | Units | Effluent Limitations |                      |                       |                  |
|--------------------------------------|-------|----------------------|----------------------|-----------------------|------------------|
|                                      |       | AMEL                 | MDEL                 | Instantaneous Maximum | 6-Month Median   |
| Phenolic Compounds (non-chlorinated) | µg/L  | -                    | 120 <sup>OP</sup>    | 300 <sup>OP</sup>     | 30 <sup>OP</sup> |
| Chlorinated Phenolics                | µg/L  | 0.025 <sup>CTR</sup> | 0.049 <sup>CTR</sup> | 10 <sup>OP</sup>      | 1 <sup>OP</sup>  |
| 1,1,2,2-tetrachlorethane (PCA)       | µg/L  | 2.3 <sup>OP</sup>    | -                    | -                     | -                |
| 1,1,1-trichloroethane (TCA)          | µg/L  | 5.4E5 <sup>OP</sup>  | -                    | -                     | -                |
| 1,1,2-trichloroethane (TCA)          | µg/L  | 9.4 <sup>OP</sup>    | -                    | -                     | -                |
| 1,2-dichloroethane                   | µg/L  | 28 <sup>OP</sup>     | -                    | -                     | -                |
| Tetrachloroethylene (PCE)            | µg/L  | 2.0 <sup>OP</sup>    | -                    | -                     | -                |
| Trichloroethylene (TCE)              | µg/L  | 27 <sup>OP</sup>     | -                    | -                     | -                |
| Vinyl chloride                       | µg/L  | 36 <sup>OP</sup>     | -                    | -                     | -                |
| Carbon tetrachloride                 | µg/L  | 0.90 <sup>OP</sup>   | -                    | -                     | -                |
| Base/Neutral Organic Compounds       | µg/L  |                      |                      | 10 <sup>AB</sup>      |                  |

| Parameter      | Units | Effluent Limitations |                    |                       |                   |
|----------------|-------|----------------------|--------------------|-----------------------|-------------------|
|                |       | AMEL                 | MDEL               | Instantaneous Maximum | 6-Month Median    |
| Ammonia (as N) | µg/L  |                      | 2400 <sup>OP</sup> | 6000 <sup>OP</sup>    | 600 <sup>OP</sup> |



| Parameter        | Units | Effluent Limitations |                    |                       |                 |
|------------------|-------|----------------------|--------------------|-----------------------|-----------------|
|                  |       | AMEL                 | MDEL               | Instantaneous Maximum | 6-Month Median  |
| Endosulfan       | ng/L  | -                    | 18 <sup>OP</sup>   | 27 <sup>OP</sup>      | 9 <sup>OP</sup> |
| HCH              | ng/L  | -                    | 8 <sup>OP</sup>    | 12 <sup>OP</sup>      | 4 <sup>OP</sup> |
| Dichloromethane  | µg/L  | 450 <sup>OP</sup>    | -                  | 5 <sup>AB</sup>       | -               |
| Halomethanes     | µg/L  | -                    | -                  | 5 <sup>AB</sup>       | -               |
| PAHs             | ng/L  | 8.8 <sup>OP</sup>    | -                  | -                     | -               |
| TCDD Equivalents | pg/L  | 0.0039 <sup>OP</sup> | -                  | -                     | -               |
| Turbidity        | µg/L  | 75 <sup>OP</sup>     | 2.2 <sup>CTR</sup> | 225                   | -               |

| Parameter  | Units | Effluent Limitations   |                   |                       |                |
|--|-------|--|-------------------|-----------------------|----------------|
|  |       | AMEL   | AWEL              | Instantaneous Minimum | 6-Month Median |
| Turbidity  | NTU   | 75 <sup>OP</sup>   | 100 <sup>OP</sup> | 225 <sup>OP</sup>     | -              |
| Turbidity  | NTU   | Shall not exceed the turbidity of the receiving water. <sup>AB</sup> |                   |                       |                |
| 126 Priority Pollutants from "Inland Surface Waters" |       |  |                   |                       |                |

## 2. DISCHARGES TO LAGOONS/ESTUARIES

The discharge of groundwater extraction waste discharges to saline lagoons (only Buena Vista Lagoon is fresh water) and estuaries of the region shall not contain pollutants in excess of the following effluent limitations:

Includes limits to the Bays and Harbors Limitations

| Parameter   | Units | Effluent Limitations                                  |      |                       |                   |
|---|-------|---|------|-----------------------|-------------------|
|   |       | AMEL  | MDEL | Instantaneous Maximum | 6-Month Median    |
| Total Nitrogen  | mg/L  | -   | -    | 2.0 <sup>AB</sup>     | 1.0 <sup>AB</sup> |
| Total Phosphorus  | mg/L  | -   | -    | .02 <sup>AB</sup>     | 0.1 <sup>AB</sup> |
| pH  | Units | Within limit of 7.0 to 8.5 at all times <sup>AB</sup> |      |                       |                   |
| All Parameters and Effluent Limitations from “Bays and Harbors” |       |   |      |                       |                   |

### 3. DISCHARGES TO THE SURF ZONE

The discharge of groundwater extraction waste to the surf zone (3:1 dilution factor) shall not contain pollutants in excess of the following effluent limitations:

#### Discharges to the Surf Zone Calculation

The formula used to calculate effluent limits for constituents discharged to the surf zone is from Table B in the Ocean Plan except for Toxicity and Radioactivity.

$$C_e = C_o + D_m(C_o - C_s)$$

$C_e$  = the effluent concentration limit, ug/L

$C_o$  = the concentration (water quality objective) to be met at the completion of initial dilution, ug/L

$D_m$  = minimum probable initial dilution expressed as parts seawater per part wastewater  
 $D_m = 3$  from findings from the 2001-96 Order.

$C_s$  = background seawater concentration (see Table C), ug/L

| Table C<br>BACKGROUND SEAWATER CONCENTRATIONS ( $C_s$ ) |              |
|---|--------------|
| Waste Constituent                                       | $C_s$ (ug/L) |
| Arsenic   | 3            |
| Copper  | 2            |
| Mercury   | 0.0005       |
| Silver  | 0.16         |
| Zinc  | 8            |
| For all other Table B parameters                        | 0            |

### DISCHARGES TO THE SURF ZONE (3:1 DILUTION FACTOR)<sup>AB</sup>

| Parameter             | Units | Effluent Limitations |                    |                       |                    |
|-----------------------|-------|----------------------|--------------------|-----------------------|--------------------|
|                       |       | AMEL                 | MDEL               | Instantaneous Maximum | 6-Month Median     |
| TCR                   | µg/L  |                      | 32 <sup>OP</sup>   | 240 <sup>OP</sup>     | 8 <sup>OP</sup>    |
| Ammonia (as Nitrogen) | µg/L  |                      | 9600 <sup>OP</sup> | 24,000 <sup>OP</sup>  | 2400 <sup>OP</sup> |
| Arsenic               | µg/L  |                      | 119 <sup>OP</sup>  | 311 <sup>OP</sup>     | 23 <sup>OP</sup>   |
| Cadmium               | µg/L  |                      | 16 <sup>OP</sup>   | 40 <sup>OP</sup>      | 4 <sup>OP</sup>    |
| Chromium (hexavalent) | µg/L  |                      | 32 <sup>OP</sup>   | 80 <sup>OP</sup>      | 8 <sup>OP</sup>    |
| Copper                | µg/L  |                      | 42 <sup>OP</sup>   | 114 <sup>OP</sup>     | 6 <sup>OP</sup>    |
| Lead                  | µg/L  |                      | 32 <sup>OP</sup>   | 80 <sup>OP</sup>      | 8 <sup>OP</sup>    |

| Parameter                            | Units | Effluent Limitations |                         |                       |                     |
|--------------------------------------|-------|----------------------|-------------------------|-----------------------|---------------------|
|                                      |       | AMEL                 | MDEL                    | Instantaneous Maximum | 6-Month Median      |
| Mercury                              | µg/L  |                      | 0.64 <sup>OP</sup>      | 1.60 <sup>OP</sup>    | 0.16 <sup>OP</sup>  |
| Nickel                               | µg/L  |                      | 80 <sup>OP</sup>        | 200 <sup>OP</sup>     | 20 <sup>OP</sup>    |
| Silver                               | µg/L  |                      | 10.7 <sup>OP</sup>      | 27.5 <sup>OP</sup>    | 2.32 <sup>OP</sup>  |
| Zinc                                 | µg/L  |                      | 296 <sup>OP</sup>       | 776 <sup>OP</sup>     | 56 <sup>OP</sup>    |
| Cyanide                              | µg/L  |                      | 16 <sup>OP</sup>        | 40 <sup>OP</sup>      | 4 <sup>OP</sup>     |
| Phenolic Compounds (Non-chlorinated) | µg/L  |                      | 480 <sup>OP</sup>       | 1200 <sup>OP</sup>    | 120 <sup>OP</sup>   |
| 1,1,2,2-tetrachloroethane            | µg/L  |                      | 9.2 <sup>OP</sup>       |                       |                     |
| Tributyltin (TBT)                    | µg/L  |                      | 0.0056 <sup>OP</sup>    |                       |                     |
| 1,1,-trichloroethane                 | µg/L  |                      | 2,160,000 <sup>OP</sup> |                       |                     |
| 1,1,2-trichloroethane                | µg/L  |                      | 37.6 <sup>OP</sup>      |                       |                     |
| Carbon tetrachloride                 | µg/L  |                      | 3.6 <sup>OP</sup>       |                       |                     |
| PCBs                                 | µg/L  |                      | 0.000076 <sup>OP</sup>  |                       |                     |
| Tetrachloroethylene                  | µg/L  |                      | 8 <sup>OP</sup>         |                       |                     |
| Trichloroethylene                    | µg/L  |                      | 108 <sup>OP</sup>       |                       |                     |
| Vinyl chloride                       | µg/L  |                      | 144 <sup>OP</sup>       |                       |                     |
| Selenium                             | µg/L  |                      | 240 <sup>OP</sup>       | 600 <sup>OP</sup>     | 60 <sup>OP</sup>    |
| Endosulfan                           | µg/L  |                      | 0.072 <sup>OP</sup>     | 0.108 <sup>OP</sup>   | 0.036 <sup>OP</sup> |
| Endrin                               | µg/L  |                      | 0.016 <sup>OP</sup>     | 0.024 <sup>OP</sup>   | 0.008 <sup>OP</sup> |
| HCH                                  | µg/L  |                      | 0.032 <sup>OP</sup>     | 0.048 <sup>OP</sup>   | 0.016 <sup>OP</sup> |
| Acrolein                             | µg/L  | 880 <sup>OP</sup>    |                         |                       |                     |
| Antimony                             | µg/L  | 4800 <sup>OP</sup>   |                         |                       |                     |
| bis(2-chloroethoxy) methane          | µg/L  | 17.6 <sup>OP</sup>   |                         |                       |                     |
| bis(2-chloroisopropyl) ether         | µg/L  | 4800 <sup>OP</sup>   |                         |                       |                     |
| Chlorobenzene                        | µg/L  | 2280 <sup>OP</sup>   |                         |                       |                     |
| di-n-butyl phthalate                 | µg/L  | 14,000 <sup>OP</sup> |                         |                       |                     |

| Parameter                   | Units | Effluent Limitations    |      |                       |                |
|-----------------------------|-------|-------------------------|------|-----------------------|----------------|
|                             |       | AMEL                    | MDEL | Instantaneous Maximum | 6-Month Median |
| Dichlorobenzenes            | µg/L  | 20,400 <sup>OP</sup>    |      |                       |                |
| 1,1-dichloroethylene        | µg/L  | 3.6 <sup>OP</sup>       |      |                       |                |
| Diethyl phthalate           | µg/L  | 132,000 <sup>OP</sup>   |      |                       |                |
| Dimethyl phthalate          | µg/L  | 3,280,000 <sup>OP</sup> |      |                       |                |
| 4,6-dinitro-2-methylphenol  | µg/L  | 880 <sup>OP</sup>       |      |                       |                |
| 2,4-dinitrophenol           | µg/L  | 16 <sup>OP</sup>        |      |                       |                |
| Ethylbenzene                | µg/L  | 16,400 <sup>OP</sup>    |      |                       |                |
| Fluoranthene                | µg/L  | 60 <sup>OP</sup>        |      |                       |                |
| Hexachlorocyclopentadiene   | µg/L  | 232 <sup>OP</sup>       |      |                       |                |
| Nitrobenzene                | µg/L  | 19.6 <sup>OP</sup>      |      |                       |                |
| Thallium                    | µg/L  | 8 <sup>OP</sup>         |      |                       |                |
| Acrylonitrile               | µg/L  | 0.4 <sup>OP</sup>       |      |                       |                |
| Aldrin                      | µg/L  | 0.000088 <sup>OP</sup>  |      |                       |                |
| Benzene                     | µg/L  | 23.6 <sup>OP</sup>      |      |                       |                |
| Benzidine                   | µg/L  | 0.000276 <sup>OP</sup>  |      |                       |                |
| Beryllium                   | µg/L  | 0.132 <sup>OP</sup>     |      |                       |                |
| Bis(2-chloroethyl) ether    | µg/L  | 0.18 <sup>OP</sup>      |      |                       |                |
| Bis(2-ethylhexyl) phthalate | µg/L  | 14 <sup>OP</sup>        |      |                       |                |
| Chlordane                   | µg/L  | 0.000092 <sup>OP</sup>  |      |                       |                |
| Chloroform                  | µg/L  | 520 <sup>OP</sup>       |      |                       |                |
| DDT                         | µg/L  | 0.00068 <sup>OP</sup>   |      |                       |                |
| 3,3-dichlorobenzidine       | µg/L  | 0.0324 <sup>OP</sup>    |      |                       |                |
| 1,2-dichloroethane          | µg/L  | 112 <sup>OP</sup>       |      |                       |                |
| Dichloromethane             | µg/L  | 1,800 <sup>OP</sup>     |      |                       |                |
| 1,3-dichloropropene         | µg/L  | 35.6 <sup>OP</sup>      |      |                       |                |

| Parameter.             | Units | Effluent Limitations   |      |                       |                |
|------------------------|-------|------------------------|------|-----------------------|----------------|
|                        |       | AMEL                   | MDEL | Instantaneous Maximum | 6-Month Median |
| Dieldrin               | µg/L  | 0.00016 <sup>OP</sup>  |      |                       |                |
| 2,4-dinitrotoluene     | µg/L  | 10.4 <sup>OP</sup>     |      |                       |                |
| 1,2-diphenylhydrazine  | µg/L  | 0.64 <sup>OP</sup>     |      |                       |                |
| Halomethanes           | µg/L  | 520 <sup>OP</sup>      |      |                       |                |
| Heptachlor             | µg/L  | 0.0002 <sup>OP</sup>   |      |                       |                |
| Hexachlorobenzene      | µg/L  | 0.00084 <sup>OP</sup>  |      |                       |                |
| Hexachlorobutadiene    | µg/L  | 56 <sup>OP</sup>       |      |                       |                |
| Hexachloroethane       | µg/L  | 10 <sup>OP</sup>       |      |                       |                |
| N-nitrosodimethylamine | µg/L  | 29.2 <sup>OP</sup>     |      |                       |                |
| N-nitrosodiphenylamine | µg/L  | 10 <sup>OP</sup>       |      |                       |                |
| PAHs                   | µg/L  | 0.0352 <sup>OP</sup>   |      |                       |                |
| TCDD equivalents       | µg/L  | 1.56E-08 <sup>OP</sup> |      |                       |                |
| Toxaphene              | µg/L  | 0.00084 <sup>OP</sup>  |      |                       |                |
| 2,4,6-trichlorophenol  | µg/L  | 1.16 <sup>OP</sup>     |      |                       |                |

| Parameter                    | Units | Effluent Limitations  |                   |                       |                   |
|------------------------------|-------|---|-------------------|-----------------------|-------------------|
|                              |       | AMEL  | AWEL              | Instantaneous Maximum | MDEL              |
| Settleable Solids            | ml/L  | 1 <sup>OP</sup>   | 1.5 <sup>OP</sup> | 3 <sup>OP</sup>       |                   |
| Suspended Solids             |       | 75% <sup>OP</sup> *   |                   |                       |                   |
|                              |       | *Suspended Solids AMEL is 75% removal unless the average monthly influent is 80 mg/L or less, then the effluent limit shall be 60 mg/L. <sup>OP</sup> |                   |                       |                   |
| pH                           |       | Within limit of 6.0 and 9.0 at all times. <sup>OP</sup>   |                   |                       |                   |
| Toluene                      |       | 340,000 <sup>OP</sup>   |                   |                       |                   |
| Xylene                       |       |   |                   | 5 <sup>AB</sup>       |                   |
| Total Petroleum Hydrocarbons |       |   |                   | 500 <sup>AB</sup>     |                   |
| Aute Toxicity                | TUa   |   |                   |                       | 0.3 <sup>OP</sup> |

| Parameter        | Units | Effluent Limitations |                   |                       |                 |
|------------------|-------|----------------------|-------------------|-----------------------|-----------------|
|                  |       | AMEL                 | AWEL              | Instantaneous Maximum | MDEL            |
| Chronic Toxicity | TUc   |                      |                   |                       | 1 <sup>OP</sup> |
| Turbidity        | NTU   | 75 <sup>OP</sup>     | 100 <sup>OP</sup> | 225 <sup>OP</sup>     |                 |

| Parameter      | Units      | Effluent Limitations   |      |                       |                      |
|----------------|------------|--|------|-----------------------|----------------------|
|                |            | AMEL   | AWEL | Instantaneous Maximum | Shellfish Harvesting |
| Total Coliform | MPN/100 mL | 1,000 <sup>OP</sup>  |      | 10,000 <sup>OP</sup>  |                      |
| Total Coliform | MPN/100 mL |  |      | 1,000 <sup>OP</sup> * |                      |
|                |            | *Total coliform density shall not exceed 1,000 per 100 mL when the ratio of fecal/total coliform exceeds 0.1 <sup>OP</sup>                                 |      |                       |                      |
| Total Coliform |            |  |      |                       | 70 <sup>OP</sup> **  |
| Total Coliform |            |  |      |                       | 230 <sup>OP</sup> ** |
|                |            | **The median total coliform density shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL. <sup>OP</sup> |      |                       |                      |
| Fecal Coliform | MPN/100 mL | 200 <sup>OP</sup>  |      | 400 <sup>OP</sup>     |                      |
| Enterococcus   | MPN/100 mL | 35 <sup>OP</sup>   |      | 104 <sup>OP</sup>     |                      |

| Parameter             | Units | Effluent Limitations |      |      |                       |                |
|-----------------------|-------|----------------------|------|------|-----------------------|----------------|
|                       |       | AMEL                 | AWEL | MDEL | Instantaneous Minimum | 6-Month Median |
| Dissolved Oxygen (DO) | mg/L  |                      |      |      | 5.0 <sup>AB</sup>     |                |

<sup>OP</sup> Basis – Ocean Plan 2005

<sup>AB</sup> Basis – Anti-Backsliding, values from the previous permit

<sup>DHS</sup> Basis – Department of Health Services

<sup>CTR</sup> Basis – California Toxics Rule/ State Implementation Plan 2005

#### 4. DISCHARGES TO INLAND SURFACE WATERS

The discharge of groundwater extraction waste to inland surface waters (including Buena Vista Lagoon) shall not contain pollutants in excess of the following effluent limitations:

##### GENERAL CONSTITUENTS

| Constituent                         | Unit      | AMEL  | Daily<br>Maximum | Instantaneous<br>Maximum | Basis |
|-------------------------------------|-----------|---|------------------|--------------------------|-------|
| Settleable Solids                   | ml/L      | 0.1   | ---              | 0.2                      | AB    |
| Total Suspended Solids              | mg/L      | 30  | ---              | 50                       |       |
| Percent Sodium                      | %         | ---   | ---              | 60                       | AB    |
| Total Nitrogen                      | mg/L      | 1.0   |                  | 2.0                      | "     |
| Total Phosphorus                    | mg/L      | 0.1   |                  | 0.2                      | "     |
| Methylene Blue<br>Active Substances | mg/L      | ---   | ---              | 0.5                      | "     |
| Turbidity                           | NTU       | Shall not exceed the ambient turbidity of the surface water at any time.  |                  |                          | "     |
| Fluoride                            | mg/L      | ---   | ---              | 1.0                      | "     |
| Hydrogen Sulfide                    | µg/L      | 2   | 4                | 10                       | AB    |
| Total Residual<br>Chlorine (TRC)    | µg/L      | 2   | 8                | 10                       | AB    |
| pH                                  | Units     | Within the limits of 6.5 and 8.5 at all times.  |                  |                          | AB    |
| Acute Toxicity                      | TUa       | ---   | ---              | 0.59                     | AB    |
| Chronic Toxicity                    | TUc       | ---   | 1                | ---                      | AB    |
| Dissolved Oxygen                    | mg/L      | Shall not be less than 5.0 at any time in waters with designated warm fresh-water habitat beneficial uses or less than 6.0 in waters with cold fresh water habitat beneficial uses. |                  |                          | AB    |
| Total Coliform                      | MPN/100mL | ---   | ---              | 1000                     | "     |
| Fecal Coliform                      | MPN/100mL | ---   | ---              | 200                      | "     |

##### VOLATILES, METALS, PRIORITY POLLUTANTS:

| Beneficial Use:                               |   | Municipal/Potable Supply |       | Non-municipal/Non-potable |                          |           |
|---|---|--------------------------|-------|---------------------------|--------------------------|-----------|
| Constituent                                   | Unit  | Instantaneous<br>Maximum | Basis | Unit                      | Instantaneous<br>Maximum | Basis     |
| Dibromochloropropane                          | µg/L  | 0.2                      | DOHS  | µg/L                      | 0.2                      | AB        |
| Ethylene Dibromide                            | µg/L  | 0.02                     | DOHS  | µg/L                      | 0.02                     | AB        |
| Xylene  | µg/L  | 5                        | AB    | µg/L                      | 5                        | AB        |
| Chlorinated Phenolics                         | µg/L  | 1                        | DOHS  | µg/L                      | 10                       | AB        |
| Remaining Base/Neutral<br>Compounds           | µg/L  | 10                       | AB    | µg/L                      | 10                       | AB        |
| Total Petroleum Hydrocarbons                  | mg/L  | 0.5                      | "     | mg/L                      | 0.5                      | AB        |
| Iron  | mg/L  | 0.3                      | "     | mg/L                      | 0.3                      | AB        |
| Manganese                                     | mg/L  | 0.05                     | "     | mg/L                      | 0.05                     | AB        |
| MTBE  | µg/L  | 5                        | DOHS  |                           |                          |           |
| 126 Priority Pollutants<br>(Including metals) | 40 CFR 131.38 - Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California. |                          |       |                           |                          | See Below |

## 126 Priority Pollutants - 40 CFR 131.38 - Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California.

The effluent limits for eight priority pollutants will be developed on a case-by-case basis because the freshwater criteria are based on site-specific water quality data.

Seven metals are dependent on water hardness, Cadmium, Copper, Chromium (III), Lead, Nickel, Silver, and Zinc [See Table 1 to 40 CFR 131.38(b)(2)], and the "Conversion Factors" for Cadmium and Lead are also water hardness dependent. [See Table 3 of 40 CFR 131.38(b)(2)]

In order to calculate the effluent limits for these seven metals the following equations from 40 CFR 131.38(b)(2) will be needed:

$$\begin{aligned} \text{Cd CFa} &= 1.136672 - ((\text{LN}(\text{hardness})) * 0.041838) \\ \text{Cd CFc} &= 1.101672 - ((\text{LN}(\text{hardness})) * 0.041838) \\ \text{Pb CFa\&c} &= 1.46203 - ((\text{LN}(\text{hardness})) * 0.145712) \\ \text{Criterion} &= \text{WER} * \text{CFx} * (\exp(\text{mA} * \text{LN}(\text{hardness})) + \text{bA}) \end{aligned}$$

Pentachlorophenol is dependent on the pH value. [See Footnote "f" to Table in 40 CFR 131.38(b)(1)]

To calculate the effluent limit for Pentachlorophenol use this equation:  
 $\text{CMC} = \exp(1.005(\text{pH}) - 4.869)$ .  $\text{CCC} = \exp(1.005(\text{pH}) - 5.134)$

The remainder of the criteria is not water quality dependent and the effluent limits can be calculated. However, not all the effluent limits will apply to all sites because of the Beneficial use designation for "Municipal" may not apply to all sites.

These priority pollutant effluent limits were calculated the same way as the effluent limits for the bays and harbors.

### Effluent Limitations calculated from CTR and SIP

#### Effluent Limits for Human Health Municipal and Non-Municipal

|    |                | Human Health |        |         |        |
|----|----------------|--------------|--------|---------|--------|
|    |                | MUN          |        | NON-MUN |        |
|    |                | AMEL         | MDEL   | AMEL    | MDEL   |
|    |                | (µg/L)       | (µg/L) | (µg/L)  | (µg/L) |
| A  |                |              |        |         |        |
| 1  | Antimony       | 14           | 28     | 4300    | 8600   |
| 2  | Arsenic        |              |        |         |        |
| 3  | Beryllium      |              |        |         |        |
| 4  | Cadmium        |              |        |         |        |
| 5a | Chromium (III) |              |        |         |        |



|    |                           | Human Health |          |         |         |
|----|---------------------------|--------------|----------|---------|---------|
|    |                           | MUN          |          | NON-MUN |         |
|    |                           | AMEL         | MDEL     | AMEL    | MDEL    |
|    |                           | (µg/L)       | (µg/L)   | (µg/L)  | (µg/L)  |
| 5b | Chromium (IV)             |              |          |         |         |
| 6  | Copper                    | 1300         | 2600     |         |         |
| 7  | Lead                      |              |          |         |         |
| 8  | Mercury                   | 0.05         | 0.1      | 0.051   | 0.1     |
| 9  | Nickel                    |              |          |         |         |
| 10 | Selenium                  |              |          |         |         |
| 11 | Silver                    |              |          |         |         |
| 12 | Thallium                  |              |          |         |         |
| 13 | Zinc                      | 700          | 1400     | 220000  | 440000  |
| 14 | Cyanide                   | 7000000      | 14000000 |         |         |
| 15 | Asbestos                  | 1.3E-08      | 2.6E-08  | 1.4E-08 | 2.8E-08 |
| 16 | 2,3,7,8-TCDD (Dioxin)     | 320          | 640      | 780     | 1600    |
| 17 | Acrolein                  | 0.059        | 0.12     | 0.66    | 1.3     |
| 18 | Acrylonitrile             | 1.2          | 2.4      | 71      | 140     |
| 19 | Benzene                   | 4.3          | 8.6      | 360     | 720     |
| 20 | Bromoform                 | 0.25         | 0.5      | 4.4     | 8.8     |
| 21 | Carbon Tetrachloride      | 680          | 1400     | 21000   | 42000   |
| 22 | Chlorobenzene             | 0.41         | 0.82     | 34      | 68      |
| 23 | Chlorodibromomethane      |              |          |         |         |
| 24 | Chloroethane              |              |          |         |         |
| 25 | 2-Chloroethylvinyl Ether  |              |          |         |         |
| 26 | Chloroform                |              |          |         |         |
| 27 | Dichlorobromomethane      | 0.56         | 1.1      | 46      | 92      |
| 28 | 1,1-Dichloroethane        |              |          |         |         |
| 29 | 1,2-Dichloroethane        | 0.38         | 0.76     | 99      | 200     |
| 30 | 1,1-Dichloroethylene      | 0.057        | 0.11     | 3.2     | 6.4     |
| 31 | 1,2-Dichloropropane       | 0.52         | 1        | 39      | 78      |
| 32 | 1,3-Dichloropropylene     | 10           | 20       | 1700    | 3400    |
| 33 | Ethylbenzene              | 3100         | 6200     | 29000   | 58000   |
| 34 | Methyl Bromide            | 48           | 96       | 4000    | 8000    |
| 35 | Methyl Chloride           |              |          |         |         |
| 36 | Methylene Chloride        | 4.7          | 9.4      | 1600    | 3200    |
| 37 | 1,1,2,2-Tetrachloroethane | 0.17         | 0.34     | 11      | 22      |

|    |                             | Human Health |         |         |         |
|----|-----------------------------|--------------|---------|---------|---------|
|    |                             | MUN          |         | NON-MUN |         |
|    |                             | AMEL         | MDEL    | AMEL    | MDEL    |
|    |                             | (µg/L)       | (µg/L)  | (µg/L)  | (µg/L)  |
| 38 | Tetrachloroethylene         | 0.8          | 1.6     | 8.9     | 18      |
| 39 | Toluene                     | 6800         | 14000   | 200000  | 400000  |
| 40 | 1,2-Trans-Dichloroethylene  | 700          | 1400    | 140000  | 280000  |
| 41 | 1,1,1-Trichloroethane       |              |         |         |         |
| 42 | 1,1,2-Trichloroethane       | 0.6          | 1.2     | 40      | 80      |
| 43 | Trichloroethylene           | 2.7          | 5.4     | 81      | 160     |
| 44 | Vinyl Chloride              | 2            | 4       | 530     | 1100    |
| 45 | 2-Chlorophenol              | 120          | 240     | 400     | 800     |
| 46 | 2,4-Dichlorophenol          | 93           | 190     | 790     | 1600    |
| 47 | 2,4-Dimethylphenol          | 540          | 1100    | 2300    | 4600    |
| 48 | 2-Methyl-4,6-Dinitrophenol  | 13           | 27      | 770     | 1500    |
| 49 | 2,4-Dinitrophenol           | 70           | 140     | 14000   | 28000   |
| 50 | 2-Nitrophenol               |              |         |         |         |
| 51 | 4-Nitrophenol               |              |         |         |         |
| 52 | 3-Methyl-4-Chlorophenol     |              |         |         |         |
| 53 | Pentachlorophenol           | 0.28         | 0.56    | 8.2     | 16      |
| 54 | Phenol                      | 21000        | 42000   | 4500000 | 9000000 |
| 55 | 2,4,6-Trichlorophenol       | 2.1          | 4.2     | 6.5     | 13      |
| 56 | Acenaphthene                | 1200         | 2400    | 2700    | 5400    |
| 57 | Acenaphthylene              |              |         |         |         |
| 58 | Anthracene                  | 9600         | 19000   | 110000  | 220000  |
| 59 | Benzidine                   | 0.00012      | 0.00024 | 0.00054 | 0.0011  |
| 60 | Benzo(a)Anthracene          | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 61 | Benzo(a)Pyrene              | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 62 | Benzo(b)Fluoranthene        | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 63 | Benzo(ghi)Perylene          |              |         |         |         |
| 64 | Benzo(k)Fluoranthene        | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 65 | Bis(2-Chloroethoxy)Methane  |              |         |         |         |
| 66 | Bis(2-Chloroethyl)Ether     | 0.031        | 0.062   | 1.4     | 2.8     |
| 67 | Bis(2-Chloroisopropyl)Ether | 1400         | 2800    | 170000  | 340000  |
| 68 | Bis(2-Ethylhexyl)Phthalate  | 1.8          | 3.6     | 5.9     | 12      |
| 69 | 4-Bromophenyl Phenyl Ether  |              |         |         |         |
| 70 | Butylbenzyl Phthalate       | 3000         | 6000    | 5200    | 10000   |

|     |                             | Human Health |         |         |         |
|-----|-----------------------------|--------------|---------|---------|---------|
|     |                             | MUN          |         | NON-MUN |         |
|     |                             | AMEL         | MDEL    | AMEL    | MDEL    |
|     |                             | (µg/L)       | (µg/L)  | (µg/L)  | (µg/L)  |
| 71  | 2-Chloronaphthalene         | 1700         | 3400    | 4300    | 8600    |
| 72  | 4-Chlorophenyl Phenyl Ether |              |         |         |         |
| 73  | Chrysene                    | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 74  | Dibenzo(a,h)Anthracene      | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 75  | 1,2 Dichlorobenzene         | 2700         | 5400    | 17000   | 34000   |
| 76  | 1,3 Dichlorobenzene         | 400          | 800     | 2600    | 5200    |
| 77  | 1,4 Dichlorobenzene         | 400          | 800     | 2600    | 5200    |
| 78  | 3,3'-Dichlorobenzidine      | 0.04         | 0.08    | 0.077   | 0.15    |
| 79  | Diethyl Phthalate           | 23000        | 46000   | 120000  | 240000  |
| 80  | Dimethyl Phthalate          | 310000       | 630000  | 2900000 | 5800000 |
| 81  | Di-n-Butyl Phthalate        | 2700         | 5400    | 12000   | 24000   |
| 82  | 2,4-Dinitrotoluene          | 0.11         | 0.22    | 9.1     | 18      |
| 83  | 2,6-Dinitrotoluene          |              |         |         |         |
| 84  | Di-nOctyl Phthalate         |              |         |         |         |
| 85  | 1,2-Diphenylhydrazine       | 0.04         | 0.08    | 0.54    | 1.1     |
| 86  | Fluoranthene                | 300          | 600     | 370     | 740     |
| 87  | Fluorene                    | 1300         | 2600    | 14000   | 28000   |
| 88  | Hexachlorobenzene           | 0.00075      | 0.0015  | 0.00077 | 0.0015  |
| 89  | Hexachlorobutadiene         | 0.44         | 0.88    | 50      | 100     |
| 90  | Hexachlorocyclopentadiene   | 240          | 480     | 17000   | 34000   |
| 91  | Hexachloroethane            | 1.9          | 3.8     | 8.9     | 18      |
| 92  | Inden(1,2,3-cd) Pyrene      | 0.0044       | 0.0088  | 0.049   | 0.098   |
| 93  | Isophorone                  | 8.4          | 17      | 600     | 1200    |
| 94  | Naphthalene                 |              |         |         |         |
| 95  | Nitrobenzene                | 17           | 34      | 1900    | 3800    |
| 96  | N-Nitrosodimethylamine      | 0.00059      | 0.0012  | 8.1     | 16      |
| 97  | N-Nitrosodi-n-Propylamine   | 0.005        | 0.01    | 1.4     | 2.8     |
| 98  | N-Nitrosodiphenylamine      | 5            | 10      | 16      | 32      |
| 99  | Phenanthrene                |              |         |         |         |
| 100 | Pyrene                      | 960          | 1900    | 11000   | 22000   |
| 101 | 1,2,4-Trichlorobenzene      |              |         |         |         |
| 102 | Aldrin                      | 0.00013      | 0.00026 | 0.00014 | 0.00028 |
| 103 | alpha-BHC                   | 0.0039       | 0.0078  | 0.013   | 0.026   |

|     |                                  | Human Health |         |         |         |
|-----|----------------------------------|--------------|---------|---------|---------|
|     |                                  | MUN          |         | NON-MUN |         |
|     |                                  | AMEL         | MDEL    | AMEL    | MDEL    |
|     |                                  | (µg/L)       | (µg/L)  | (µg/L)  | (µg/L)  |
| 104 | beta-BHC                         | 0.014        | 0.028   | 0.046   | 0.092   |
| 105 | gamma-BHC                        | 0.019        | 0.038   | 0.063   | 0.13    |
| 106 | delta-BHC                        |              |         |         |         |
| 107 | Chlordane                        | 0.00057      | 0.0011  | 0.00059 | 0.0012  |
| 108 | 4,4'-DDT                         | 0.00059      | 0.0012  | 0.00059 | 0.0012  |
| 109 | 4,4'-DDE                         | 0.00059      | 0.0012  | 0.00059 | 0.0012  |
| 110 | 4,4'-DDD                         | 0.00083      | 0.0017  | 0.00084 | 0.0017  |
| 111 | Dieldrin                         | 0.00014      | 0.00028 | 0.00014 | 0.00028 |
| 112 | alpha-Endosulfan                 | 110          | 220     | 240     | 480     |
| 113 | beta-Endosulfan                  | 110          | 220     | 240     | 480     |
| 114 | Endosulfan Sulfate               | 110          | 220     | 240     | 480     |
| 115 | Endrin                           | 0.76         | 1.5     | 0.81    | 1.6     |
| 116 | Endrin Aldehyde                  | 0.76         | 1.5     | 0.81    | 1.6     |
| 117 | Heptachlor                       | 0.00021      | 0.00042 | 0.00021 | 0.00042 |
| 118 | Heptachlor Epoxide               | 0.0001       | 0.0002  | 0.00011 | 0.00022 |
| 119 | Polychlorinated biphenyls (PCBs) | 0.00017      | 0.00034 | 0.00017 | 0.00034 |
| 120 | "                                |              |         |         |         |
| 121 | "                                |              |         |         |         |
| 122 | "                                |              |         |         |         |
| 123 | "                                |              |         |         |         |
| 124 | "                                |              |         |         |         |
| 125 | "                                |              |         |         |         |
| 126 | Toxaphene                        | 0.00073      | 0.0015  | 0.00075 | 0.0015  |

## Effluent Limits for Freshwater and Saltwater

| A  |                          | Freshwater |        | Saltwater |        |
|----|--------------------------|------------|--------|-----------|--------|
|    |                          | MDEL       | AMEL   | MDEL      | AMEL   |
|    |                          | (µg/L)     | (µg/L) | (µg/L)    | (µg/L) |
| 1  | Antimony                 |            |        |           |        |
| 2  | Arsenic                  | 250        | 120    | 59        | 29     |
| 3  | Beryllium                |            |        |           |        |
| 4  | Cadmium                  | *          | *      | 16        | 8      |
| 5a | Chromium (III)           | *          | *      |           |        |
| 5b | Chromium (IV)            | 16         | 8.1    | 83        | 41     |
| 6  | Copper                   | *          | *      | 5.8       | 2.9    |
| 7  | Lead                     | *          | *      | 14        | 7      |
| 8  | Mercury                  |            |        |           |        |
| 9  | Nickel                   | *          | *      | 14        | 6.8    |
| 10 | Selenium                 | 8.2        | 4.1    | 120       | 58     |
| 11 | Silver                   | *          | *      | 2.2       | 1.1    |
| 12 | Thallium                 |            |        |           |        |
| 13 | Zinc                     | *          | *      | 95        | 47     |
| 14 | Cyanide                  | 8.5        | 4.2    | 1         | 0.5    |
| 15 | Asbestos                 |            |        |           |        |
| 16 | 2,3,7,8-TCDD (Dioxin)    |            |        |           |        |
| 17 | Acrolein                 |            |        |           |        |
| 18 | Acrylonitrile            |            |        |           |        |
| 19 | Benzene                  |            |        |           |        |
| 20 | Bromoform                |            |        |           |        |
| 21 | Carbon Tetrachloride     |            |        |           |        |
| 22 | Chlorobenzene            |            |        |           |        |
| 23 | Chlorodibromomethane     |            |        |           |        |
| 24 | Chloroethane             |            |        |           |        |
| 25 | 2-Chloroethylvinyl Ether |            |        |           |        |
| 26 | Chloroform               |            |        |           |        |
| 27 | Dichlorobromomethane     |            |        |           |        |
| 28 | 1,1-Dichloroethane       |            |        |           |        |
| 29 | 1,2-Dichloroethane       |            |        |           |        |
| 30 | 1,1-Dichloroethylene     |            |        |           |        |

|    |                            | Freshwater |        | Saltwater |        |
|----|----------------------------|------------|--------|-----------|--------|
|    |                            | MDEL       | AMEL   | MDEL      | AMEL   |
|    |                            | (µg/L)     | (µg/L) | (µg/L)    | (µg/L) |
| 31 | 1,2-Dichloropropane        |            |        |           |        |
| 32 | 1,3-Dichloropropylene      |            |        |           |        |
| 33 | Ethylbenzene               |            |        |           |        |
| 34 | Methyl Bromide             |            |        |           |        |
| 35 | Methyl Chloride            |            |        |           |        |
| 36 | Methylene Chloride         |            |        |           |        |
| 37 | 1,1,2,2-Tetrachloroethane  |            |        |           |        |
| 38 | Tetrachloroethylene        |            |        |           |        |
| 39 | Toluene                    |            |        |           |        |
| 40 | 1,2-Trans-Dichloroethylene |            |        |           |        |
| 41 | 1,1,1-Trichloroethane      |            |        |           |        |
| 42 | 1,1,2-Trichloroethane      |            |        |           |        |
| 43 | Trichloroethylene          |            |        |           |        |
| 44 | Vinyl Chloride             |            |        |           |        |
| 45 | 2-Chlorophenol             |            |        |           |        |
| 46 | 2,4-Dichlorophenol         |            |        |           |        |
| 47 | 2,4-Dimethylphenol         |            |        |           |        |
| 48 | 2-Methyl-4,6-Dinitrophenol |            |        |           |        |
| 49 | 2,4-Dinitrophenol          |            |        |           |        |
| 50 | 2-Nitrophenol              |            |        |           |        |
| 51 | 4-Nitrophenol              |            |        |           |        |
| 52 | 3-Methyl-4-Chlorophenol    |            |        |           |        |
| 53 | Pentachlorophenol          | **         | **     | 13        | 6.5    |
| 54 | Phenol                     |            |        |           |        |
| 55 | 2,4,6-Trichlorophenol      |            |        |           |        |
| 56 | Acenaphthene               |            |        |           |        |
| 57 | Acenaphthylene             |            |        |           |        |
| 58 | Anthracene                 |            |        |           |        |
| 59 | Benzidine                  |            |        |           |        |
| 60 | Benzo(a)Anthracene         |            |        |           |        |
| 61 | Benzo(a)Pyrene             |            |        |           |        |
| 62 | Benzo(b)Fluoranthene       |            |        |           |        |
| 63 | Benzo(ghi)Perylene         |            |        |           |        |
| 64 | Benzo(k)Fluoranthene       |            |        |           |        |

|    |                             | Freshwater |        | Saltwater |        |
|----|-----------------------------|------------|--------|-----------|--------|
|    |                             | MDEL       | AMEL   | MDEL      | AMEL   |
|    |                             | (µg/L)     | (µg/L) | (µg/L)    | (µg/L) |
| 65 | Bis(2-Chloroethoxy)Methane  |            |        |           |        |
| 66 | Bis(2-Chloroethyl)Ether     |            |        |           |        |
| 67 | Bis(2-Chloroisopropyl)Ether |            |        |           |        |
| 68 | Bis(2-Ethylhexyl)Phthalate  |            |        |           |        |
| 69 | 4-Bromophenyl Phenyl Ether  |            |        |           |        |
| 70 | Butylbenzyl Phthalate       |            |        |           |        |
| 71 | 2-Chloronaphthalene         |            |        |           |        |
| 72 | 4-Chlorophenyl Phenyl Ether |            |        |           |        |
| 73 | Chrysene                    |            |        |           |        |
| 74 | Dibenzo(a,h)Anthracene      |            |        |           |        |
| 75 | 1,2 Dichlorobenzene         |            |        |           |        |
| 76 | 1,3 Dichlorobenzene         |            |        |           |        |
| 77 | 1,4 Dichlorobenzene         |            |        |           |        |
| 78 | 3,3'-Dichlorobenzidine      |            |        |           |        |
| 79 | Diethyl Phthalate           |            |        |           |        |
| 80 | Dimethyl Phthalate          |            |        |           |        |
| 81 | Di-n-Butyl Phthalate        |            |        |           |        |
| 82 | 2,4-Dinitrotoluene          |            |        |           |        |
| 83 | 2,6-Dinitrotoluene          |            |        |           |        |
| 84 | Di-nOctyl Phthalate         |            |        |           |        |
| 85 | 1,2-Diphenylhydrazine       |            |        |           |        |
| 86 | Fluoranthene                |            |        |           |        |
| 87 | Fluorene                    |            |        |           |        |
| 88 | Hexachlorobenzene           |            |        |           |        |
| 89 | Hexachlorobutadiene         |            |        |           |        |
| 90 | Hexachlorocyclopentadiene   |            |        |           |        |
| 91 | Hexachloroethane            |            |        |           |        |
| 92 | Inden(1,2,3-cd) Pyrene      |            |        |           |        |
| 93 | Isophorone                  |            |        |           |        |
| 94 | Naphthalene                 |            |        |           |        |
| 95 | Nitrobenzene                |            |        |           |        |
| 96 | N-Nitrosodimethylamine      |            |        |           |        |
| 97 | N-Nitrosodi-n-Propylamine   |            |        |           |        |
| 98 | N-Nitrosodiphenylamine      |            |        |           |        |

|     |                                     | Freshwater |         | Saltwater |         |
|-----|-------------------------------------|------------|---------|-----------|---------|
|     |                                     | MDEL       | AMEL    | MDEL      | AMEL    |
|     |                                     | (µg/L)     | (µg/L)  | (µg/L)    | (µg/L)  |
| 99  | Phenanthrene                        |            |         |           |         |
| 100 | Pyrene                              |            |         |           |         |
| 101 | 1,2,4-Trichlorobenzene              |            |         |           |         |
| 102 | Aldrin                              | 3          | 1.5     | 1.3       | 0.65    |
| 103 | alpha-BHC                           |            |         |           |         |
| 104 | beta-BHC                            |            |         |           |         |
| 105 | gamma-BHC                           | 0.95       | 0.47    | 0.16      | 0.08    |
| 106 | delta-BHC                           |            |         |           |         |
| 107 | Chlordane                           | 0.007      | 0.0035  | 0.0066    | 0.0033  |
| 108 | 4,4'-DDT                            | 0.0016     | 0.00082 | 0.0016    | 0.00082 |
| 109 | 4,4'-DDE                            |            |         |           |         |
| 110 | 4,4'-DDD                            |            |         |           |         |
| 111 | Dieldrin                            | 0.092      | 0.046   | 0.0031    | 0.0016  |
| 112 | alpha-Endosulfan                    | 0.092      | 0.046   | 0.014     | 0.0071  |
| 113 | beta-Endosulfan                     | 0.092      | 0.046   | 0.014     | 0.0071  |
| 114 | Endosulfan Sulfate                  |            |         |           |         |
| 115 | Endrin                              | 0.059      | 0.029   | 0.0038    | 0.0019  |
| 116 | Endrin Aldehyde                     |            |         |           |         |
| 117 | Heptachlor                          | 0.0062     | 0.0031  | 0.0059    | 0.0029  |
| 118 | Heptachlor Epoxide                  | 0.0062     | 0.0031  | 0.0059    | 0.0029  |
| 119 | Polychlorinated biphenyls<br>(PCBs) | 0.023      | 0.011   | 0.049     | 0.025   |
| 120 | "                                   |            |         |           |         |
| 121 | "                                   |            |         |           |         |
| 122 | "                                   |            |         |           |         |
| 123 | "                                   |            |         |           |         |
| 124 | "                                   |            |         |           |         |
| 125 | "                                   |            |         |           |         |
| 126 | Toxaphene                           | 0.00033    | 0.00016 | 0.00033   | 0.00016 |

\* Use equations from 40 CFR 131.38(b)(2)

\*\* Use equations from 40 CFR 131.38(b)(1) footnote "F"



5. Groundwater extraction waste discharged to surface waters must be essentially free of:
  - a. Material that is floatable or will become floatable upon discharge.
  - b. Settleable material or substances that form sediments which degrade<sup>23</sup> benthic communities or other aquatic life.
  - c. Substances which will accumulate to toxic levels in aquatic sediments or biota.
  - d. Substances that significantly<sup>24</sup> decrease the natural light to benthic communities and other aquatic life.
  - e. Materials that result in aesthetically undesirable discoloration of surface waters.
6. Groundwater extraction waste discharged to surface waters shall not cause natural water quality conditions to be altered in areas designated as being of special biological significance or areas that existing marine laboratories use as a source of seawater.
7. Groundwater extraction waste discharged to surface waters shall be discharged in such a manner as to provide maximum protection to aquatic environments.
8. Groundwater extraction waste that contains pathogenic organisms or viruses shall be discharged a sufficient distance from shellfishing and water-contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard shall be used.
9. The Enrollee shall comply with all items of the "40 CFR Standard Provisions References" that are part of this Order (Attachment B).

#### **IV. Rationale for Receiving Water Limitations**

- A. Surface Water  
Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan. The discharge of groundwater extraction waste from any site shall not, separately or jointly with any other discharge, cause violations of the following water quality objectives in the surface waters of the San Diego Region.
  1. Bacterial Characteristics

a. Water-Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water-contact sports, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- (1) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).
- (2) The fecal coliform density based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

b. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- 1) The median total coliform density shall not exceed 70 per 100 ml; and
- 2) Not more than 10 percent of the samples shall exceed 230 per 100 ml.

2. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible.
- b. The discharge of waste shall not cause aesthetically undesirable discoloration of the surface waters.
- c. Natural light shall not be significantly reduced.
- d. The rate of deposition of solids and the characteristics of inert solids in the sediments shall not be changed such that benthic communities are degraded.

3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste materials.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- d. The concentration of substances set forth in the Discharge Specifications in marine sediments shall not be increased to levels which would degrade indigenous biota.
- e. The concentration of organic materials in the sediments shall not be increased to levels which would degrade marine life.
- f. Nutrient materials shall not cause objectionable aquatic growth or degrade indigenous biota.

4. Biological Characteristics

- a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
- b. The natural taste, odor, and color of fish, shellfish, or other aquatic resources used for human consumption shall not be altered.
- c. The concentration of organic materials in fish, shellfish or other aquatic resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

5. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

6. Toxic Materials Limitations

Since there is no dilution, toxic materials limits are the same as the effluent limits.

**V. Rationale for Monitoring and Reporting Requirements**

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Board to require technical and monitoring reports. The MRP, Attachment E of this WDR, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this permit.

A. Influent Monitoring (Not applicable)

B. Effluent Monitoring

In reviewing the monitoring reports, the State Board found that although Dischargers were reporting Total Petroleum Hydrocarbons (TPH), a distinction between diesel and gasoline was not always made. Results for TPH should be reported as total TPH, TPH diesel (TPH-d), and TPH gasoline (TPH-g). Also, for detections of TPH-g, the amount of benzene, ethylbenzene, toluene, and xylene

should be reported. Benzene, ethylbenzene, and toluene are priority pollutants. (40 CFR § 131).

C. Whole Effluent Toxicity (WET) Testing Requirements

A WET Limit is required if a discharge causes, has a reasonable potential to cause, or contributes to an exceedance of applicable water quality standards, including numeric and narrative. Since these types of discharges are prohibited under this WDR, WET limits are not applicable.

D. Receiving Water Monitoring

States are required to adopt numeric criteria where they are necessary to protect designated uses. (CWA §§ 303(a) – 303(c)). The Regional Board adopted numeric criteria in the Basin Plan. The Basin Plan is a regulatory reference for meeting the State and Federal requirements for water quality control. (40 CFR 131.20). State Board Resolution 68-16, the Antidegradation Policy, does not allow changes in water quality less than that prescribed in Water Quality Control Plans (Basin Plans). The Basin Plan states that; "The numerical and narrative water quality objectives define the least stringent standards that the Regional Water Board will apply to regional waters in order to protect the beneficial uses." This WDR contains Receiving Water Limitations based on the Basin Plan numerical and narrative water quality objectives for Biostimulatory Substances, Chemical Constituents, Color, Dissolved Oxygen, Floating Material, Oil and Grease, pH, Pesticides, Radioactivity, Salinity, Sediment, Settleable Material, Suspended Material, Tastes and Odors, Temperature, Toxicity and Turbidity.

Section 13267 of the California Water Code states, in part,

(a) A regional board, in establishing ... waste discharge requirements ... may investigate the quality of any waters of the state within its region" and "(b) (1) In conducting an investigation ... the regional board may require that any person who ... discharges ... waste ... that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

The attached Monitoring and Reporting Program is issued pursuant to CWC section 13267. The groundwater extraction waste discharge monitoring and reporting program required by this WDR and the attached Monitoring and Reporting Program are necessary to determine compliance with these waste discharge requirements. The Discharger is responsible for the discharges of waste at the facility subject to this WDR.

E. Other Monitoring Requirements (Not Applicable)

## **VI. Rationale for Provisions**

### **A. Standard Provisions**

Standard Provisions, which in accordance with 40 CFR sections 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D.

### **B. Special Provisions**

1. Reopener Provisions (Not Applicable)
2. Special Studies and Additional Monitoring Requirements (Not Applicable)
3. Best Management Practices and Pollution Prevention Plan (Not Applicable)
4. Compliance Schedules (Not Applicable)
5. Construction, Operation, and Maintenance Specifications (Not Applicable)
6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)
7. Other Special Provisions

The Dischargers shall dispose of solids removed from liquid wastes in a manner that is consistent with Title 27 of the CCR and approved by the Regional Board.

## **VII. Public Participation**

In considering the re-issuance and adoption of this WDR the Regional Board has developed a draft WDR. The Regional Board encouraged public participation in the WDR adoption process.

### **A. Notification of Interested Parties**

The Regional Board notified interested agencies and persons of its intent to prescribe waste discharge requirements in this WDR and provided them with an opportunity to submit their written comments and recommendations. Notification was posted on the Regional Board's webpage on February 5, 2008, and published in the San Diego Union Tribune, The Riverside Press-Enterprise, and The Orange County Register newspapers on February 8, 2008. On March 12, 2008, the Regional Board sent out notification through the Regional Board Agenda by an electronic mail list.

**B. Written Comments**

Interested persons were invited to submit written comments concerning the tentative WDR. Comments were to be submitted in person, by fax, email, or mail to the Executive Officer at the Regional Board at the address on the cover page of this Permit.

To be fully addressed and considered by the Regional Board, written comments must have been received at the Regional Board office by 5 p.m. on March 5, 2008.

**C. Public Hearing**

The Regional Board held a public hearing on the tentative WDR during its regular meeting on the following date and at the following location:

Date: **March 12, 2008**  
Location: **California Regional Water Quality Control Board  
San Diego Region  
Regional Board Meeting Room  
9174 Sky Park Court, Suite 100  
San Diego, California 92123**

Interested persons were invited to attend. At the public hearing, the Regional Board heard testimony pertinent to the discharge and WDR.

**D. Information and Copying**

WDR-related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. A partial list of these items are on the Regional Board's web site at: [www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

Copying of documents may be arranged through the Regional Board by calling (858) 467-2952.

**E. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDR was invited to contact the Regional Board, reference this WDR, and provide a name, address, and telephone number.

**F. Additional Information**

Requests for additional information or questions regarding this WDR may be directed to Vicente Rodriguez at (858) 627-3940 or at: [VRodriguez@waterboards.ca.gov](mailto:VRodriguez@waterboards.ca.gov)

This WDR will expire on March 12, 2012. Enrollees covered under this WDR at the time of expiration will be required to re-enroll under the reissued permit.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**RESOLUTION NO. R9-2007-0104**

AMENDMENT TO THE  
*WATER QUALITY CONTROL PLAN FOR THE  
SAN DIEGO BASIN (9)* TO INCORPORATE THE REVISED  
CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS  
FOR SPECIFIC TYPES OF DISCHARGE WITHIN THE SAN DIEGO REGION

WHEREAS, the California Regional Water Quality Control Board, San Diego Region (hereinafter San Diego Water Board), finds that:

1. Section 13260(a)(1) of the Water Code requires that any person (including any city, county, district, or other entity) discharging, or proposing to discharge, wastes within the San Diego Region that could affect the quality of waters of the state, other than into a community sewer system, must file a report of waste discharge (RoWD) with the San Diego Water Board.
2. Section 13050 of the Water Code defines waters of the state as any surface or groundwater, including saline waters, within the boundaries of the state.
3. Section 13263(a) of the Water Code requires that the San Diego Water Board prescribe discharge requirements for any existing or proposed waste discharges within its area of jurisdiction, except discharges into a community sewer system, even if no RoWD has been filed.
4. Section 13269 of the Water Code gives the San Diego Water Board the authority to conditionally waive the provisions of sections 13260(a)(1) and/or 13263(a) for a specific discharge or specific type of discharge where such a waiver is consistent with the Basin Plan and in the public interest and the following conditions are met: 1) the waiver is conditional, 2) waiver conditions include performance of individual, group, or watershed-based monitoring, except for discharges that the State Water Resources Control Board (State Water Board) or a Regional Water Quality Control Board (Regional Water Board) determines not to pose a significant threat to water quality, 3) compliance with waiver conditions by the discharger, and 4) a public hearing is held.
5. According to Water Code section 13350(a)(2), any person who discharges waste in violation of any waiver condition shall be liable civilly, and remedies may be proposed, in accordance with Water Code section 13350(d) or (e).
6. Section 13269 of the Water Code does not give the San Diego Water Board the authority to issue conditional waivers of waste discharge requirements for

discharges subject to federal regulation under Chapter 5.5, commencing with section 13370, Division 7 of the Water Code, implementing the federal Clean Water Act and the Federal National Pollutant Discharge Elimination System (NPDES) regulations.

7. A conditional waiver for a specific discharge or specific type of discharge may be terminated at any time by the State Water Board or San Diego Water Board. A conditional waiver is not required to be used by the San Diego Water Board. Even if a discharger complies with all the conditions of a conditional waiver, the San Diego Water Board may choose to regulate any specific discharge with waste discharge requirements.
8. Nevertheless, there are several types or categories of discharge for which waivers are desirable. Conditional waivers allow the San Diego Water Board to utilize fewer resources, allowing it to focus on discharges that have a higher potential threat to water quality in the Region. Dischargers also benefit from fewer resource requirements when discharging in compliance with a conditional waiver. Therefore, issuing conditional waivers for discharges, whenever possible, is in the best interest of the San Diego Water Board, the dischargers, and the public.
9. The 26 existing conditional waivers renewed by Resolution No. R9-2002-0186 became effective January 1, 2003 and will expire December 31, 2007.
10. When the existing 26 waivers were originally adopted in either 1983, 1993, and/or 1995, the San Diego Water Board acted as lead agency for the projects under the California Environmental Quality Act (CEQA) [Public Resources Code section 21000 et seq.] and adopted Negative Declarations concurrently with the resolutions adopting those conditional waivers. Because the proposed conditions in this Basin Plan amendment for the 26 existing waivers do not differ significantly from the current waiver conditions, the CEQA does not require additional environmental analysis of these waivers in order to renew them with this Resolution.
11. The San Diego Water Board, in compliance with Water Code section 13269, reviewed the waiver conditions for the specific types of discharge eligible for the existing conditional waivers and determined that the waiver conditions should be revised to improve the protection of water quality in the San Diego Region. The existing conditional waivers and proposed revisions to the waiver conditions are reviewed and discussed in Appendix A of the Technical Report entitled *Basin Plan Amendment to Renew and Issue Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge within the San Diego Region*.
12. The San Diego Water Board also reviewed other specific types of discharge in the San Diego Region that should be allowed to be eligible for conditional waivers. Nine (9) additional specific types of discharge were identified that could be allowed to be eligible for conditional waivers, which include the following:
  - a) *“Low threat” discharges to land.*
  - b) *Discharges from on-site graywater systems.*
  - c) *Discharges from grazing lands.*



- d) *Wildfire suppression and fuels management activities.*
- e) *Discharge/reuse of soils characterized as inert from known contaminated sites.*
- f) *Concrete grinding residues.*
- g) *Temporary waste piles and surface impoundments for disaster related wastes.*
- h) *Temporary waste piles and emergency landfills for mass mortality wastes.*
- i) *Discharges of wastes related to fireworks displays.*

These new types of discharge and proposed waiver conditions are reviewed and discussed in Appendix B of the Technical Report entitled *Basin Plan Amendment to Renew and Issue Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge within the San Diego Region*.

13. In order to simplify the use of the conditional waivers and waiver conditions, the types of discharge with similar discharge properties, locations, and/or waiver conditions were grouped according to discharge classifications, as shown in Table D-1 in Attachment A. General waiver conditions were developed for a discharger or discharge operation, or all specific types of discharge within a discharge classification. Specific waiver conditions were developed for specific types of discharge within a discharge classification, as applicable.
14. The conditional waivers in the Basin Plan should be amended and issued in accordance with the revisions proposed in section 7 of the Technical Report to allow the certain specific types of discharge to be eligible for conditional waivers. Discharges that can comply with waiver conditions are not expected to pose a significant threat to the quality or beneficial uses of waters in the San Diego Region.
15. Because the conditional waivers are part of the Basin Plan, renewing and issuing the conditional waivers with the proposed revisions require a Basin Plan amendment.
16. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the California Regional Water Quality Control Boards' basin planning process as a "certified regulatory program" that adequately satisfies the CEQA (Public Resources Code, section 21000 et seq.) requirements for preparing environmental documents [California Code of Regulations Title 14 section 15251(g) and Title 23 section 3782]. As such, the documents supporting the San Diego Water Board's proposed basin planning action contain the required environmental documentation, including an environmental checklist, under the CEQA and serve as "substitute documents" [California Code of Regulations Title 23 section 3777]. The substitute documents for this project include the environmental checklist, the detailed Technical Report, the Resolution and Basin Plan amendment, and responses to comments submitted during the public participation phase in the development of this Resolution.
17. Because the San Diego Water Board already approved and adopted Negative Declarations for the specific types of discharge adopted by Resolution No. R9-2002-0186, the scope of the environmental analysis required to satisfy CEQA for this Basin Plan amendment was limited to the 9 specific types of discharge added to the revised conditional waivers.

18. The San Diego Water Board circulated a draft Technical Report and environmental checklist and analysis describing the proposed activity to interested individuals and public agencies for review and comment.
19. The accompanying substitute environmental documents satisfy the requirements of substitute documents for a Tier 1 environmental review under CEQA, pursuant to Public Resources Code section 21159 and California Code of Regulations Title 14 section 15187. Project level impacts will need to be considered in any subsequent environmental analysis performed by other entities implementing projects to comply with waiver conditions pursuant to Public Resources Code section 21159.2.
20. The Basin Plan amendment and conditional waivers are consistent with State Water Board Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality Waters in California*), the state's "Antidegradation Policy." Likewise, the Basin Plan amendment and conditional waivers are consistent with the federal Antidegradation Policy [Code of Federal Regulations Title 40 section 131.12]. The San Diego Water Board must maintain high quality waters of the state unless it is demonstrated that any degradation will be consistent with the maximum benefit to the people of the state, will not unreasonably affect beneficial uses, and will not result in water quality worse than that described in the San Diego Water Board's policies. The conditional waivers in the Basin Plan amendment include conditions that require dischargers to minimize or eliminate discharges of pollutants that can have adverse impacts on the water quality that supports beneficial uses of waters of the state. Conditional waivers for specific discharges can be terminated if waiver conditions are not met.
21. The San Diego Water Board has notified all known interested persons and the public of its intent to consider adoption of the proposed Basin Plan amendment in accordance with Water Code section 13244. Interested persons and the public have had reasonable opportunity to participate in review of the proposed Basin Plan amendment. Efforts to solicit public review and comment have included a public workshop and CEQA scoping meeting held on April 5, 2007; a public review and comment period beginning at least 30-days preceding the public hearing; and a public hearing held on August 8, 2007.
22. The San Diego Water Board has considered all comments pertaining to this Basin Plan amendment submitted to the San Diego Water Board in writing, or by oral presentations at the public hearing held on August 8, 2007. Detailed responses to relevant comments have been incorporated into a Response to Comments document (Appendix E to the Technical Report).
23. The San Diego Water Board has considered the costs of implementing the proposed Basin Plan amendment. The proposed amendment will not result in any additional economic burden for dischargers, except for dischargers that would like to be eligible for Conditional Waiver No. 4, which is for discharges from agricultural and nursery operations. Agricultural and nursery operations that would like to be enrolled under Conditional Waiver No. 4 must prepare a Monitoring and Reporting Program Plan

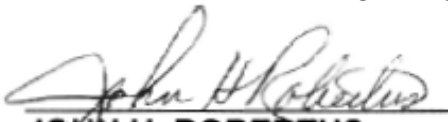
(MRPP) and Quality Assurance Project Plan (QAPP), conduct monitoring, and submit a Monitoring Program Report (MPR).

24. This Basin Plan amendment will result in no adverse effect, either individually or cumulatively, on wildlife.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The San Diego Water Board hereby adopts the Amendment to the *Water Quality Control Plan for the San Diego Basin (9)* to Incorporate the Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge within the San Diego Region as set forth in Attachment A to this Resolution.
2. The San Diego Water Board hereby approves the Technical Report entitled *Basin Plan Amendment to Renew and Issue Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge within the San Diego Region*, dated October 10, 2007.
3. The substitute environmental documents prepared pursuant to Public Resources Code section 21080.5 are hereby certified, and the Executive Officer is directed to file a Notice of Decision with the Resources Agency after State Water Board and Office of Administrative Law approval of the Basin Plan amendment, in accordance with Public Resources Code section 21080.5(d)(2)(E) and California Code of Regulations Title 23 section 3781.
4. The Executive Officer is authorized to sign a Certificate of Fee Exemption for a no adverse impact finding and shall submit this Certificate *in lieu* of payment of the California Department of Fish and Game (CDFG) filing fee.
5. The Executive Officer is directed to submit this Basin Plan amendment to the State Water Board for approval in accordance with Water Code section 13245.
6. If, during the approval process for this amendment, the San Diego Water Board, State Water Board, or Office of Administrative Law determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the San Diego Water Board of any such changes.

*I, John H. Robertus, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of a resolution adopted by the California Regional Water Quality Control Board, San Diego Region, on October 10, 2007.*

  
**JOHN H. ROBERTUS**  
**Executive Officer**

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**Attachment A to Resolution No. R9-2007-0104**

**Amendments to  
Chapter 4 and Appendix D of the Basin Plan**

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# ATTACHMENT A

## TO RESOLUTION NO. R9-2007-0104

### AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE SAN DIEGO BASIN (9) TO INCORPORATE THE REVISED CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE WITHIN THE SAN DIEGO REGION

This Basin Plan amendment incorporates and authorizes the revised conditional waivers of waste discharge requirements for specific types of discharge within the San Diego Region. Chapter 4, Table 4-4, the Table of Contents for the Appendices, and Appendix D of the Basin Plan are amended as follows with revisions shown in ~~red strikeout~~ text for deletions, and blue underlined text for additions:

#### CHAPTER 4 – IMPLEMENTATION

##### CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS ~~WAIVER POLICY~~

The Regional Board may waive issuance of waste discharge requirements and/or the requirement to file reports of waste discharge for a specific discharge or specific types of discharge pursuant to ~~California~~ Water Code Section 13269 if such waiver is determined ~~not~~ to be ~~against consistent with~~ the Basin Plan and in the public interest.

The waiver of adoption of waste discharge requirements is not applicable to discharges subject to federal NPDES ~~permit~~ regulations. The federal Clean Water Act does not provide for a waiver of the need to obtain an NPDES permit for point source discharges of pollutants to surface waters.

Amendments to ~~California~~ Water Code Section 13269, effective January 1, 2003 provided that waivers may not exceed five years duration and must be conditional. Under these amendments the regional boards were required to:

- Renew waivers every five years;
- Review the terms, conditions and effectiveness of each ~~type-of~~ waiver ~~included in their waiver policies~~ at a

public hearing;

- Determine if general or individual waste discharge requirements should be issued for ongoing discharges where waivers have been terminated; and,
- Require compliance with waiver conditions.

~~The~~A waiver of waste discharge requirements is conditional and may be terminated at any time by the Regional Board for any specific discharge or any specific type of discharge. A conditional waiver is not required to be used by the Regional Board. Even if a discharger complies with all the conditions of a conditional waiver, the Regional Board may still choose to regulate any specific discharge with waste discharge requirements.

The Regional Board has determined that a waiver of adoption of waste discharge requirements for a specific type of discharge would not be against the public interest under one or more of the following circumstances:

- The type of discharge is effectively regulated by other public agencies; or
- The type of discharge does not adversely affect the quality or the

## ATTACHMENT A TO RESOLUTION NO. R9-2007-0104

beneficial uses of the waters of the state; or

- The type of discharge is not readily amenable to regulation through adoption of waste discharge requirements but warrants Regional Board oversight to insure compliance with mandated conditions.

On ~~September 11, 2002~~October 10, 2007, the Regional Board conditionally waived adoption of waste discharge requirements for certain specific types of discharges described in Table 4-4. ~~This~~These conditional waivers took effect on January 1, ~~2003~~2008 and expires on January 1, ~~2008~~2013, ~~except for discharges for which Table 4-4 specifies an earlier expiration date.~~

The following general conditions apply to all discharges ~~types~~ described in Table 4-4:

- The discharge shall not create a nuisance or pollution as defined in the ~~California~~ Water Code; and
- The discharge shall not cause a violation of any applicable water quality standard for the receiving waters adopted by the Regional Board, or the State Water Resources Control Board, as required by the Clean Water Act; and
- The discharge of any substance in concentrations toxic to animal or plant life is prohibited.

In addition, the discharges must satisfy the specific conditions described in Table 4-4 and Appendix D.

~~The discharges in Table 4-4 have been assigned to either Category 1 or Category 2, for purpose of Regional Board oversight for determination of compliance with waiver conditions. Discharges covered by Category 1 waivers pose a greater potential threat to water quality than those in Category 2.~~

~~For Category 1 waivers, waste discharge requirements for a specific discharge shall be considered waived only after enrollment in accord with procedures established by the Regional Board. For most of the discharges~~

~~in Category 1, programs administered by the Regional Board or other public agencies will provide the information necessary to satisfy the enrollment requirements. No additional enrollment procedures will be necessary for these discharges.~~

~~An enrollment process has been established for the remaining discharges. Dischargers may contact the Regional Board office to determine if enrollment is necessary for a specific discharge. The Regional Board will determine compliance with Category 1 waiver conditions using a program that includes on-site inspections and/or review of the records of other public agencies that regulate these discharges.~~

~~For Category 2 waivers, enrollment is not necessary. The Regional Board will assess compliance with Category 2 waiver conditions by means of surveys or other indirect methods.~~



**Table 4-4 Types of Discharge Eligible for Conditional Waivers of Waste Discharge Requirements**

| <b><u>Conditional Waiver No.</u></b> | <b><u>Discharge Classification</u></b>          | <b><u>Types of Discharge Included in Conditional Waiver Discharge Classification</u></b>  | <b><u>Conditions</u></b> |
|--------------------------------------|---|---|--------------------------|
| 1                                    | <u>Discharges from on-site disposal systems</u> | <ul style="list-style-type: none"> <li>a) <u>Discharges from conventional septic tank/subsurface disposal systems for residential units</u></li> <li>b) <u>Discharges from conventional septic tank/subsurface disposal systems for commercial/industrial establishments</u></li> <li>c) <u>Discharges from alternative individual sewerage systems</u></li> <li>d) <u>Discharges from conventional septic tank/subsurface disposal systems for campgrounds</u></li> <li>e) <u>Discharges from on-site graywater disposal systems</u></li> </ul>  | <u>See Appendix D</u>    |
| 2                                    | <u>"Low threat" discharges to land</u>          | <ul style="list-style-type: none"> <li>a) <u>Discharges from construction and test pumping of water wells to land</u></li> <li>b) <u>Discharges of air conditioner condensate and non-contact cooling water to land</u></li> <li>c) <u>Swimming pool discharges to land</u></li> <li>d) <u>Discharges from short-term construction dewatering operations to land</u></li> <li>e) <u>"Low Threat" discharges to land and/or groundwater including the following:</u> <ul style="list-style-type: none"> <li>-<u>Groundwater pumped from drinking water wells</u></li> <li>-<u>Groundwater from foundation drains, crawl space pumps, and footing drains</u></li> <li>-<u>Discharges from flushing water lines</u></li> <li>-<u>Discharges from washing vehicles, pavement, buildings, etc.</u></li> <li>-<u>Infiltration from residential/commercial/industrial/recreational facility landscape and lawn irrigation using groundwater or municipal supply water</u></li> <li>-<u>Infiltration from structural infiltration-based BMPs</u></li> </ul> </li> </ul> | <u>See Appendix D</u>    |

**Table 4-4 Types of Discharge Eligible for Conditional Waivers of Waste Discharge Requirements**

| <b><u>Conditional Waiver No.</u></b> | <b><u>Discharge Classification</u></b>   | <b><u>Types of Discharge Included in Conditional Waiver Discharge Classification</u></b>  | <b><u>Conditions</u></b> |
|--------------------------------------|--|---|--------------------------|
| <u>3</u>                             | <u>Discharges from animal operations</u>                                       | a) <u>Discharges from medium animal feeding operations (300-999 animal units, where 1 animal unit is equivalent to 1 cow or 1,000 animal pounds)</u><br>b) <u>Discharges from small animal feeding operations (less than 300 animal units)</u><br>c) <u>Discharges of storm water runoff</u><br>d) <u>Discharge/application of manure to soil as an amendment or mulch</u><br>e) <u>Discharges from grazing lands</u> | <u>See Appendix D</u>    |
| <u>4</u>                             | <u>Discharges from agricultural and nursery operations</u>                     | a) <u>Discharges of plant crop residues to land</u><br>b) <u>Discharges of storm water runoff</u><br>c) <u>Discharge/application of amendments or mulches to soil</u><br>d) <u>Discharges of agricultural irrigation return water</u><br>e) <u>Discharges of nursery irrigation return water</u>  | <u>See Appendix D</u>    |
| <u>5</u>                             | <u>Discharges from silvicultural operations</u>                                | a) <u>Discharges of storm water runoff</u><br>b) <u>Discharges from timber harvesting projects</u><br>c) <u>Discharges from wildfire suppression and fuels management activities</u>  | <u>See Appendix D</u>    |
| <u>6</u>                             | <u>Discharges of dredged or fill materials nearby or within surface waters</u> | a) <u>Discharges from sand and gravel mining operations</u><br>b) <u>Discharges from dredging projects</u><br>c) <u>Discharges from stream channel alternation projects</u><br>d) <u>Other projects proposing to discharge dredged or fill material nearby or within surface waters of the state</u>  | <u>See Appendix D</u>    |

**Table 4-4 Types of Discharge Eligible for Conditional Waivers of Waste Discharge Requirements**

| <b><u>Conditional Waiver No.</u></b> | <b><u>Discharge Classification</u></b>                 | <b><u>Types of Discharge Included in Conditional Waiver Discharge Classification</u></b>   | <b><u>Conditions</u></b> |
|--------------------------------------|--|--|--------------------------|
| <u>7</u>                             | <u>Discharges of recycled water to land</u>            | a) <u>Discharges to land from short-term recycled water projects (without permanent recycled water delivery and/or distribution systems, not to exceed 365 days)</u><br>b) <u>Discharges to land from permanent recycled water projects (with permanent recycled water delivery and/or distribution systems, limited to the period prior to the discharge being authorized and regulations under WDRs, WRRs, and/or MRP, not to exceed 365 days)</u> | <u>See Appendix D</u>    |
| <u>8</u>                             | <u>Discharges/disposal of solid wastes to land</u>     | a) <u>Discharges of plant crop residues to land</u><br>b) <u>Discharge/application of amendments and mulches to soil</u><br>c) <u>Discharges of inert wastes to solid waste disposal facilities accepting only inert wastes</u><br>d) <u>Discharges of soils containing wastes to temporary waste piles</u><br>e) <u>Discharge/disposal/reuse of soils characterized as inert from contaminated sites to land</u>                                    | <u>See Appendix D</u>    |
| <u>9</u>                             | <u>Discharges of slurries to land</u>                  | a) <u>Discharges of on-site drilling mud to land</u><br>b) <u>Discharges of concrete grinding residues to land</u>   | <u>See Appendix D</u>    |
| <u>10</u>                            | <u>Discharges of emergency/disaster related wastes</u> | a) <u>Incidental discharges of oil and oily water within a response area during an oil spill response in marine waters</u><br>b) <u>Discharges of disaster related waste to temporary waste piles and surface impoundments</u><br>c) <u>Discharges of mass mortality wastes to temporary waste piles and emergency landfills</u><br>d) <u>Other discharges of emergency/disaster related wastes</u>  | <u>See Appendix D</u>    |
| <u>11</u>                            | <u>Aerially discharged wastes over land</u>            | a) <u>Discharges of wastes related to fireworks displays over land</u><br>b) <u>Other wastes discharged aerially over land that may adversely affect the quality of the groundwaters of the state, but determined to be "low threat" by the San Diego Water Board</u>  | <u>See Appendix D</u>    |

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ATTACHMENT A TO RESOLUTION NO. R9-2007-0104

| TYPE OF WASTE DISCHARGE  | SPECIFIC CONDITION(S)   | WAIVER CATEGORY | REFERENCES, REMARKS, ETC.  |
|--|---|-----------------|--|
| 1. <del>Conventional septic tank/subsurface disposal systems for residential units.</del>                    | <del>Subject to the conditions set forth in the <i>Basin Plan, Chapter 4, (Implementation)</i> section entitled <i>Guidelines for New Community and Individual Sewerage Facilities</i>, and where systems are not constructed within areas designated as Zone A as defined by the California Department of Health Services' <i>Drinking Water Source Assessment and Protection Program</i>. This waiver applies until six months after the State Water Resources Control Board adopts statewide criteria for on-site disposal systems pursuant to AB 885.</del> | <del>1</del>    | <del><i>Basin Plan, Chapter 4 (Implementation)</i> section entitled <i>Guidelines for New Community and Individual Sewerage Facilities, Drinking Water Source Assessment and Protection Program</i>, California Department of Health Services (DHS).<br/><br/>AB 885 requires that the State Water Resources Control Board develop statewide criteria for on-site disposal systems by January 1, 2004.</del> |
| 2. <del>Conventional septic tank/subsurface disposal systems for commercial/industrial establishments.</del> | <del>Subject to the conditions set forth in the <i>Basin Plan, Chapter 4, (Implementation)</i> section entitled <i>Guidelines for New Community and Individual Sewerage Facilities</i>, and where systems are not constructed within areas designated as Zone A as defined by the California Department of Health Services' <i>Drinking Water Source Assessment and Protection Program</i>. This waiver applies until six months after the State Water Resources Control Board adopts statewide criteria for on-site disposal systems pursuant to AB 885.</del> | <del>1</del>    | <del><i>Basin Plan, Chapter 4 (Implementation)</i> section entitled <i>Guidelines for New Community and Individual Sewerage Facilities, Drinking Water Source Assessment and Protection Program</i>, California Department of Health Services (DHS).<br/><br/>AB 885 requires that the State Water Resources Control Board develop statewide criteria for on-site disposal systems by January 1, 2004.</del> |

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| TYPE OF WASTE DISCHARGE   | SPECIFIC CONDITION(S)  | WAIVER CATEGORY | REFERENCES, REMARKS, ETC.   |
|---|--|-----------------|---|
| 3. <del>Alternative individual sewerage systems.</del>                              | <del>Subject to the conditions set forth in the Basin Plan, Chapter 4, (Implementation) section entitled Guidelines for New Community and Individual Sewerage Facilities, and where systems are not constructed within areas designated as Zone A as defined by the California Department of Health Services' Drinking Water Source Assessment and Protection Program. This waiver applies until six months after the State Water Resources Control Board adopts statewide criteria for on-site disposal systems pursuant to AB 885.</del> | 1               | <del>Basin Plan, Chapter 4 (Implementation) section entitled Guidelines for New Community and Individual Sewerage Facilities, Drinking Water Source Assessment and Protection Program, California Department of Health Services (DHS).</del><br><br><del>AB 885 requires that the State Water Resources Control Board develop statewide criteria for on-site disposal systems by January 1, 2004.</del> |
| 4. <del>Conventional septic tank/subsurface disposal systems for campgrounds.</del> | <del>Where no facilities are provided which would enable recreational vehicles to connect with the campground sewerage system, and where systems are not constructed within areas designated as Zone A as defined by the California Department of Health Services' Drinking Water Source Assessment and Protection Program.</del>  | 1               | <del>Basin Plan, Chapter 4 (Implementation) section entitled Guidelines for New Community and Individual Sewerage Facilities, Drinking Water Source Assessment and Protection Program, California Department of Health Services (DHS).</del>  |
| 5. <del>Construction and test pumping of water wells.</del>                         | <del>Where the well water pumped is uncontaminated; and where the well was not constructed for and is not to be used in ground water cleanup operations.</del>   | 2               |   |
| 6. <del>Air conditioner condensate.</del>   |  | 2               |   |

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| TYPE OF WASTE DISCHARGE  | SPECIFIC CONDITION(S)  | WAIVER CATEGORY     | REFERENCES, REMARKS, ETC.  |
|--|--|---------------------|--|
| <p><del>7. Animal feeding operations for the following species in the numbers indicated: goats, swine, sheep, horses, buffalo and poultry. Slaughter and feeder cattle (300 to 1000 animals) Swine (750 to 2500 animals) Horses (150 to 500 animals) Sheep or lambs (3000 to 10,000 animals) Turkeys (16,500 to 55,000 animals) Laying hens or broilers (9000 to 30,000 animals) Ducks (1500 to 5000 animals) Mixed species (cumulative total of 300 to 1000 animal units, as defined in 40 CFR 122, Appendix B)</del></p> | <p><del>Where the animal feeding operation is not a “concentrated animal feeding operation” under U.S. EPA regulations pertaining to the National Pollutant Discharge Elimination System. the facility is operated and maintained in conformance with the regulations cited in Sections 22562 through 22565, Division 2, Title 27 of the California Code of Regulations, and where wastes are not discharged to water courses, except where rainfall exceeds the capacity of a facility that is in conformance with these regulations.</del></p> | <p><del>1</del></p> | <p><del>United States Environmental Protection Agency Consolidated Permit Regulations, 40 CFR 122.54 and United States Environmental Protection Agency Guide Manual on NPDES Regulations for Concentrated Animal Feeding Operations.</del></p> |

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| TYPE OF WASTE DISCHARGE   | SPECIFIC CONDITION(S)  | WAIVER CATEGORY     | REFERENCES, REMARKS, ETC.  |
|---|--|---------------------|--|
| <p><del>8. Animal feeding operations for the following species in the numbers indicated:</del></p> <p><del>Slaughter and feeder cattle (less than 300)</del></p> <p><del>Swine (less than 750 animals)</del></p> <p><del>Horses (less than 150 animals)</del></p> <p><del>Sheep or lambs (less than 3000 animals)</del></p> <p><del>Turkeys (less than 16,500 animals)</del></p> <p><del>Laying hens or broilers (less than 9000 animals)</del></p> <p><del>Ducks (less than 1500 animals)</del></p> <p><del>Goats (any number)</del></p> <p><del>Buffalo (any number)</del></p> <p><del>Mixed species (cumulative total of less than 300 animal units, as defined in 40 CFR 122, Appendix B)</del></p> | <p><del>Where the facility is operated and maintained in conformance with the regulations cited in Sections 22562 through 22565, Division 2, Title 27 of the California Code of Regulations, and where wastes are not discharged to water courses, except where rainfall exceeds the capacity of a facility that is in conformance with these regulations.</del></p> | <p><del>2</del></p> | <p><del>United States Environmental Protection Agency Consolidated Permit Regulations, 40 CFR 122.54 and United States Environmental Protection Agency Guide Manual on NPDES Regulations for Concentrated Animal Feeding Operations.</del></p> |



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| TYPE OF WASTE DISCHARGE   | SPECIFIC CONDITION(S)  | WAIVER CATEGORY | REFERENCES, REMARKS, ETC.  |
|---|--|-----------------|--|
| <del>9. Plant crop residues.</del>                              | <del>Where such residues are plowed into fields (as opposed to being disposed of en masse, e.g. in a pit).</del>   | <del>2</del>    | <del>For the purposes of this document, "plant crop residues" shall be defined as waste plant crops and nonmarketable portions of plants.</del>                                  |
| <del>10. Storm water runoff.</del>                              | <del>Where no NPDES permit is required, and where appropriate best management practices, such as those recommended by US EPA's Risk Reduction Engineering Laboratory, are implemented to minimize the discharge of contaminants in runoff infiltrating to ground water aquifers.</del> | <del>2</del>    | <del>United States Environmental Protection Agency <i>Project Summary, Potential Groundwater Contamination from Intentional and Nonintentional Stormwater Infiltration</i></del> |
| <del>11. Sand and gravel mining operations.</del>               | <del>Where operations are not conducted in flowing streams; and where water quality certification pursuant to Federal Clean Water Act Section 401 has been issued.</del>   | <del>1</del>    | <del>This waiver does not apply to wash water or other discharges from sand and gravel processing operations.</del>  |
| <del>12. Intermittent swimming pool discharges.</del>           | <del>Where pool filter backwash is not discharged.</del>   | <del>2</del>    |  |
| <del>13. Dredging project wastes.</del>                         | <del>Where the dredging project does not involve more than 5000 yd<sup>3</sup> of material and where water quality certification pursuant to Federal Clean Water Act Section 401 has been issued.</del>  | <del>1</del>    |  |
| <del>14. Short term construction dewatering operations.</del>   | <del>Where there is no discharge to surface waters.</del>  | <del>2</del>    |  |
| <del>15. Manure composting and soil amendment operations.</del> | <del>Where State Water Resources Control Board <i>Minimal Guidelines for Protection of Water Quality from Animal Wastes</i> are followed.</del>  | <del>1</del>    | <del>Adopted by the State Water Resources Control Board on March 1, 1973.</del>  |

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| TYPE OF WASTE DISCHARGE   | SPECIFIC CONDITION(S)   | WAIVER CATEGORY | REFERENCES, REMARKS, ETC.   |
|---|---|-----------------|---|
| <del>16. Solid waste disposal facilities accepting only inert wastes.</del> | <del>Where State Water Resources Control Board regulations, requirements and guidelines for disposal of such wastes are satisfied; and where Fish and Game Code Section 5650 is not violated.</del>         | <del>1</del>    | <del>The applicable document as of the date of adoption of the Resolution is <i>Discharges of Waste to Land</i> (CCR Title 23, Division 3, Chapter 15).</del>               |
| <del>17. Stream channel alterations.</del>                                  | <del>Where water quality certification pursuant to Federal Clean Water Act Section 401 has been issued.</del>   | <del>1</del>    |   |
| <del>18. Agricultural irrigation return water.</del>                        | <del>Where management measures and best management practices have been implemented as described in the Plan for California's Nonpoint Source Pollution Control Program</del>                                | <del>2</del>    | <del>For the purposes of this document, "agriculture" shall be defined as the production of fiber and/or food (including food for animal consumption, e.g., alfalfa).</del> |
| <del>19. Nursery irrigation return water.</del>                             | <del>Where there is no discharge to waters of the U.S., and where best management practices have been implemented as described in the Plan for California's Nonpoint Source Pollution Control Program</del> | <del>1</del>    | <del>For the purposes of this document, a "nursery" shall be defined as a facility engaged in growing plants (shrubs, trees, vines, etc.) for sale.</del>                   |
| <del>20. Short term use of reclaimed wastewater.</del>                      | <del>See Appendix D.</del>  | <del>1</del>    |   |

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| TYPE OF WASTE DISCHARGE   | SPECIFIC CONDITION(S)   | WAIVER CATEGORY | REFERENCES, REMARKS, ETC.  |
|---|---|-----------------|--|
| 21. <del>On-site drilling mud discharge.</del>                      | <del>Where discharge is to a sump with a minimum freeboard of two feet; and</del><br><del>Where sump is not to be used for ultimate disposal of drilling mud (unless discharger demonstrates that material is nontoxic and does not contain dissolved or soluble salts in quantities which could adversely affect basin groundwater quality); and</del><br><del>Where sump site is restored to predrilling state within 60 days of completion or abandonment of well.</del> | 2               |  |
| 22. <del>Timber harvesting.</del>                                   | <del>Where harvesting occurs on National Forest System lands managed by the United States Forest Service in accordance with the practices and procedures set forth in the document entitled <i>Water Quality Management for National Forest System Lands in California</i>.</del>   | 2               | <del>Management Agency Agreement between State Water Resources Control Board and the United States Forest Service (United States Department of Agriculture).</del> |
| 23. <del>Temporary discharge of specified contaminated soils.</del> | See Appendix D.   | 1               |  |

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| TYPE OF WASTE DISCHARGE  | SPECIFIC CONDITION(S)  | WAIVER CATEGORY | REFERENCES, REMARKS, ETC. |
|--|--|-----------------|---------------------------|
| <del>24. Green waste composting facilities.</del>                                    | <del>See Appendix D.</del>   | <del>2</del>    |                           |
| <del>25. Incidental discharges within a response area during a spill response.</del> | <del>The discharge must meet the definition of “<i>incidental discharge</i>” as this, and related terms are defined in the <i>Memorandum of Understanding Between the Department of Fish and Game’s Office of Oil Spill Prevention and Response and the State Water Resources Control Board Relating to Discharges Associated with Response Activities Conducted Pursuant to Ch. 7.4, Division 1 of the Government Code.</i></del> | <del>2</del>    |                           |
| <del>26. Permanent reclaimed water projects.</del>                                   | <del>See Appendix D.</del>   | <del>1</del>    |                           |

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**APPENDIX D**  
**CONDITIONS FOR**  
**CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS**  
**IN TABLE 4-4**

In order for the conditional waivers to be consistent with the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan), the following general overall conditions apply to each specific type of discharge to be eligible for a conditional waiver:

- The discharge shall not create a nuisance<sup>1</sup> or pollution<sup>2</sup> as defined in the Porter-Cologne Water Quality Control Act (Water Code);
- The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), or the State Water Resources Control Board (State Water Board), as required by the Federal Water Pollution Control Act (Clean Water Act); and
- The discharge of any substance in concentrations toxic to animal or plant life is prohibited.

In addition to the general overall conditions listed above, the San Diego Water Board determined that it is consistent with the Basin Plan and in the public interest to issue conditional waivers under one or more of the following circumstances:

- The type of discharge is effectively regulated by other public agencies; or
- The type of discharge does not adversely affect the quality or the beneficial uses of the waters of the state; or
- The type of discharge is not readily amenable to regulation through adoption of waste discharge requirements (WDRs), but warrants San Diego Water Board oversight to ensure compliance with the mandated conditions (e.g., Basin Plan water quality objectives).

There are 35 specific types of discharge that are eligible for a conditional waiver of waste discharge requirements. However, in examining the specific types of discharge that are eligible for a conditional waiver, several of the discharge types are similar and/or related in terms of discharge setting, discharge source, and/or waiver conditions.

Instead of developing conditional waivers for each specific type of discharge, an integrated approach was employed to simplify the conditional waivers. Types of discharge that are similar in nature or originate from a common setting or operation were grouped together into a

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<sup>1</sup> "Nuisance" is defined by Water Code section 13050(m) as anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and (3) Occurs during, or as a result of, the treatment or disposal of wastes.

<sup>2</sup> "Pollution" is defined by Water Code section 13050(l)(1) as an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects waters for beneficial uses or facilities which serve these beneficial uses. Pollution may include contamination.

“discharge classification,” as shown in Table D-1. The grouping allows dischargers to easily identify all the waiver conditions that may apply to their operations.

For example, discharge types that typically require a Clean Water Act section 401 Water Quality Certification (401 Certification) were grouped together in Conditional Waiver No. 6. A type of discharge that typically requires a 401 Certification is one where dredged and/or fill material may be discharged to land and/or surface waters. These types of discharge include sand and gravel mining operations, dredging project wastes, and stream channel alterations. All of these types of discharge have similar waiver conditions.

There are several types of discharge classified as discharges from agricultural and/or nursery operations in Conditional Waiver No. 4. Discharges of plant crop residues, storm water runoff from agricultural lands, mulches and/or amendment applied to soil, agricultural return water or nursery irrigation return water, and green wastes for composting can all occur on the same site. Many of the proposed waiver conditions are similar, and many, if not all, of these types of discharge are found on nursery or agricultural operations.

Therefore, as in the examples above, the types of discharge eligible for conditional waivers were grouped into 11 discharge classifications. One type of discharge may be included in more than one discharge classification. For example, discharges of plant crop residues are included in both Conditional Waiver No. 4 for discharges from agricultural and nursery operations, and Conditional Waiver No. 8 for discharges/disposal of solid wastes to land.

Table D-1 lists the discharge classifications and associated conditional waiver identification number, and groups the specific types of discharge according to those discharge classifications.

**Table D-1 Conditional Waivers and Discharge Classifications**

| <b><u>Conditional Waiver No.</u></b> | <b><u>Discharge Classification</u></b>          | <b><u>Types of Discharge Included in Conditional Waiver Discharge Classification</u></b>  |
|--------------------------------------|---|---|
| <u>1</u>                             | <u>Discharges from on-site disposal systems</u> | <ul style="list-style-type: none"> <li>a) <u>Discharges from conventional septic tank/subsurface disposal systems for residential units</u></li> <li>b) <u>Discharges from conventional septic tank/subsurface disposal systems for commercial/industrial establishments</u></li> <li>c) <u>Discharges from alternative individual sewerage systems</u></li> <li>d) <u>Discharges from conventional septic tank/subsurface disposal systems for campgrounds</u></li> <li>e) <u>Discharges from on-site graywater disposal systems</u></li> </ul>  |
| <u>2</u>                             | <u>“Low threat” discharges to land</u>          | <ul style="list-style-type: none"> <li>a) <u>Discharges from construction and test pumping of water wells to land</u></li> <li>b) <u>Discharges of air conditioner condensate and non-contact cooling water to land</u></li> <li>c) <u>Swimming pool discharges to land</u></li> <li>d) <u>Discharges from short-term construction dewatering operations to land</u></li> <li>e) <u>“Low Threat” discharges to land and/or groundwater including the following:</u> <ul style="list-style-type: none"> <li>-<u>Groundwater pumped from drinking water wells</u></li> <li>-<u>Groundwater from foundation drains, crawl space pumps, and footing drains</u></li> <li>-<u>Discharges from flushing water lines</u></li> <li>-<u>Discharges from washing vehicles, pavement, buildings, etc.</u></li> <li>-<u>Infiltration from residential/commercial/industrial/recreational facility landscape and lawn irrigation using groundwater or municipal supply water</u></li> <li>-<u>Infiltration from structural infiltration-based BMPs</u></li> </ul> </li> </ul> |



**Table D-1 Conditional Waivers and Discharge Classifications**

| <b>Conditional Waiver No.</b> | <b>Discharge Classification</b>  | <b>Types of Discharge Included in Conditional Waiver Discharge Classification</b>   |
|-------------------------------|--|---|
| <u>3</u>                      | <u>Discharges from animal operations</u>                                       | a) <u>Discharges from medium animal feeding operations (300-999 animal units, where 1 animal unit is equivalent to 1 cow or 1,000 animal pounds)</u><br>b) <u>Discharges from small animal feeding operations (less than 300 animal units)</u><br>c) <u>Discharges of storm water runoff</u><br>d) <u>Discharge/application of manure to soil as an amendment or mulch</u><br>e) <u>Discharges from grazing lands</u>               |
| <u>4</u>                      | <u>Discharges from agricultural and nursery operations</u>                     | a) <u>Discharges of plant crop residues to land</u><br>b) <u>Discharges of storm water runoff</u><br>c) <u>Discharge/application of amendments or mulches to soil</u><br>d) <u>Discharges of agricultural irrigation return water</u><br>e) <u>Discharges of nursery irrigation return water</u>  |
| <u>5</u>                      | <u>Discharges from silvicultural operations</u>                                | a) <u>Discharges of storm water runoff</u><br>b) <u>Discharges from timber harvesting projects</u><br>c) <u>Discharges from wildfire suppression and fuels management activities</u>  |
| <u>6</u>                      | <u>Discharges of dredged or fill materials nearby or within surface waters</u> | a) <u>Discharges from sand and gravel mining operations</u><br>b) <u>Discharges from dredging projects</u><br>c) <u>Discharges from stream channel alternation projects</u><br>d) <u>Other projects proposing to discharge dredged or fill material nearby or within surface waters of the state</u>  |
| <u>7</u>                      | <u>Discharges of recycled water to land</u>                                    | a) <u>Discharges from short-term recycled water projects (without permanent recycled water delivery and/or distribution systems, not to exceed 365 days)</u><br>b) <u>Discharges from permanent recycled water projects (with permanent recycled water delivery and/or distribution systems, limited to the period prior to the discharge being authorized and regulated under WDRs, WRRs, and/or MRPs, not to exceed 365 days)</u> |
| <u>8</u>                      | <u>Discharges/disposal of solid wastes to land</u>                             | a) <u>Discharges of plant crop residues to land</u><br>b) <u>Discharge/application of amendments and mulches to soil</u><br>c) <u>Discharges of inert wastes to solid waste disposal facilities only accepting inert wastes</u><br>d) <u>Discharges of soils containing wastes to temporary waste piles</u><br>e) <u>Discharge/disposal/reuse of soils characterized as inert from contaminated sites to land</u>                   |
| <u>9</u>                      | <u>Discharges of slurries to land</u>  | a) <u>Discharges of on-site drilling mud to land</u><br>b) <u>Discharges of concrete grinding residues to land</u>  |
| <u>10</u>                     | <u>Discharges of emergency/disaster related wastes</u>                         | a) <u>Incidental discharges of oil and oily water within a response area during an oil spill response in marine waters</u><br>b) <u>Discharges of disaster related wastes to temporary waste piles and surface impoundments</u><br>c) <u>Discharges of mass mortality waste to temporary waste piles and emergency landfills</u><br>d) <u>Other discharges of emergency/disaster related wastes</u>                                 |
| <u>11</u>                     | <u>Aerially discharged wastes over land</u>                                    | a) <u>Discharges of wastes related to fireworks displays over land</u><br>b) <u>Other wastes discharged aerially over land that may adversely affect the quality of the groundwaters of the state, but determined to be "low threat" by the San Diego Water Board</u>   |

For each conditional waiver, General Waiver Conditions were developed that are applicable to a discharger or discharge operation, or all specific types of discharge within a discharge classification. Specific Waiver Conditions were developed that are applicable to specific types of discharge within a discharge classification, when specific conditions were determined to be necessary. The General and Specific Waiver Conditions for Conditional Waiver Nos. 1 through 11 are given in the following pages.

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**CONDITONAL WAIVER NO. 1 – DISCHARGES FROM ON-SITE DISPOSAL SYSTEMS**

Conditional Waiver No. 1 is for discharges of effluent from on-site disposal systems which are a source of pollutants that can infiltrate to groundwater. Discharges of effluent from on-site disposal systems include domestic wastewater (sewage) and graywater, but not industrial wastewater, which is discharged to the subsurface, located within the property that generated the waste stream.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 1:

- Discharges from conventional septic tank/subsurface disposal systems for residential units
- Discharges from conventional septic tank/subsurface disposal systems for commercial/industrial establishments
- Discharges from alternative individual sewerage systems
- Discharges from conventional septic tank/subsurface disposal systems for campgrounds
- Discharges from on-site graywater disposal systems

In order to be eligible for Conditional Waiver No. 1, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges from on-site disposal systems include the following:

1.I.A. General Waiver Conditions for On-site Disposal Systems

1.II.A. Specific Waiver Conditions for On-site Septic and Sewerage Systems

1.II.B. Specific Waiver Conditions for On-site Graywater Systems

Discharges from on-site disposal systems that comply with the general and specific waiver conditions in Conditional Waiver No. 1 are not expected to pose a significant threat to the quality of waters of the state.

**1.I.A. General Waiver Conditions for On-site Disposal Systems**

1. Prevent the direct or indirect discharge of effluent from on-site disposal systems to any surface waters of the state (including ephemeral streams and vernal pools).
2. Effluent from on-site disposal systems must be discharged to the subsurface and cannot surface or pond.
3. Effluent from on-site disposal systems must not adversely affect the quality or beneficial uses underlying groundwater.
4. Effluent from on-site disposal systems must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
5. Effluent from on-site disposal systems must be discharged at least 5 feet above highest known historical or anticipated groundwater level.
6. Effluent from on-site disposal systems must be discharged at least 100 feet away from any surface water body.
7. Effluent from on-site disposal systems must not adversely impact the quality or beneficial uses of groundwater in any water wells.

8. On-site disposal systems must be designed and operated in accordance with applicable regulatory requirements and/or standards as provided in the Specific Conditions.
9. The owner/operator of an on-site disposal system must comply with local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies. Copies of any approvals, permits, certifications, and/or licenses must be available on site for inspection.
10. The owner/operator of an on-site disposal system must maintain and operate the system in accordance with the design approved by the authorized local agencies.
11. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
12. On-site disposal systems can only accept domestic wastes and/or wastewater.

#### **1.II.A. Specific Waiver Conditions for On-site Septic and Sewerage Systems**

1. For existing on-site septic or sewerage systems, the following conditions apply:
  - a) Existing on-site septic or sewerage systems serving campgrounds must not allow connections from recreational vehicles.
  - b) Owners/operators of existing on-site septic or sewerage systems that cause a condition of contamination, pollution, or nuisance must cease the use of the system and repair or replace it with a compliant system, or permanently remove the system from operation.
  - c) After adoption of State Water Board on-site wastewater treatment system (OWTS) regulations, any existing on-site septic or sewerage systems that is replaced, requires major repair, pools or discharges to the surface of the ground, or has the reasonable potential to cause a violation of water quality objectives, to impair present or future beneficial uses of water, to cause pollution, nuisance, or contamination of waters of the state must be brought into compliance with new OWTS regulations. Owners/operators of on-site septic or sewerage systems that cannot bring their system into compliance must cease the use of the system and replace it with a compliant system, or permanently remove the system from operation.
2. For new on-site septic or sewerage systems, the following conditions apply:
  - a) New on-site septic or sewerage systems installed at campgrounds must not allow connections from recreational vehicles.
  - b) New on-site septic or sewerage systems must comply with the conditions set forth in the section entitled *Guidelines for New Community and Individual Sewerage Facilities* in Chapter 4 (Implementation) of the Basin Plan.
  - c) New on-site septic or sewerage systems proposed to be constructed in areas where groundwater water quality objectives have been exceeded must be evaluated for potential adverse effects on groundwater quality and beneficial uses to determine if regulating the system with individual WDRs is more appropriate.
  - d) New on-site septic or sewerage systems proposed to be constructed within areas designated as Zone A, as defined by the California Department of Public Health's Drinking Water Source Assessment and Protection Program, must be

constructed with an adequate setback from the drinking water supply source that will be protective of drinking water quality.

- e) Six (6) months after adoption of State Water Board OWTS regulations, applications received by the authorized local agency for the construction of new on-site septic or sewerage systems must be in compliance with new OWTS regulations for design and installation.

**1.II.B. Specific Waiver Conditions for On-site Graywater Systems**

1. An on-site graywater system must be permitted by the city, county, or other authorized local agency that has jurisdiction over the installation. The on-site graywater system must be designed and installed, at a minimum, according to the California Plumbing Code (CPC) Graywater Standards.<sup>3</sup> If the city, county, and/or other authorized local agencies have additional requirements, the graywater system must be designed and installed to comply with those requirements.
2. On-site graywater systems proposed to be constructed in areas where groundwater water quality objectives have been exceeded must be evaluated for potential adverse effects on groundwater quality and beneficial uses to determine if regulating the system with individual WDRs is more appropriate.
3. New on-site graywater systems proposed to be constructed within areas designated as Zone A, as defined by the California Department of Public Health's Drinking Water Source Assessment and Protection Program, must be constructed with an adequate setback from the drinking water supply source that will be protective of drinking water quality.

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<sup>3</sup> California Code of Regulations Title 24 (also known as the California Building Standards Administrative Code) Part 5 (also known as the California Plumbing Code) Appendix G

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## **CONDITIONAL WAIVER NO. 2 – “LOW THREAT” DISCHARGES TO LAND**

Conditional Waiver No. 2 is for “low threat” discharges to land, which can percolate to groundwater. “Low threat” discharges include liquid wastes containing pollutant concentrations that are not expected to adversely impact the quality of waters of the state under ambient conditions. “Low threat” discharges may include potable water or uncontaminated groundwater. Potable water and uncontaminated groundwater are not considered waste when initially discharged. However, when this water comes into contact with pollutants and transports those pollutants in surface runoff or leaches those pollutants into the soil and groundwater, it becomes a waste. “Low threat” discharges to land are not expected to contain significant concentrations of pollutants that can adversely affect the quality of underlying groundwater.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 2:

- Discharges from the construction and test pumping of water wells to land
- Discharges of air conditioner condensate or non-contact cooling water to land
- Swimming pool discharges to land
- Discharges from short-term construction dewatering operations to land
- “Low Threat” discharges to land and/or groundwater, which may including the following:
  - Groundwater pumped from drinking water wells
  - Groundwater from foundation drains, crawl space pumps, and footing drains
  - Discharges from flushing water lines
  - Discharges from washing vehicles, pavement, buildings, etc.
  - Infiltration from residential/commercial/industrial/recreational facility landscape and lawn irrigation using groundwater or municipal supply water
  - Infiltration from structural infiltration-based best management practices (BMPs)

In order to be eligible for Conditional Waiver No. 2, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to “low threat” discharges to land include the following:

- 2.I.A. General Waiver Conditions for “Low Threat” Discharges of Water to Land
- 2.II.A. Specific Waiver Conditions for Air Conditioner Condensate and Non-contact Cooling Water Discharges to Land
- 2.II.B. Specific Waiver Conditions for Swimming Pool Discharges to Land
- 2.II.C. Specific Waiver Conditions for Pumping of Groundwater from Wells to Land
- 2.II.D. Specific Waiver Conditions for Dewatering Operations Discharged to Land
- 2.II.E. Specific Waiver Conditions for Discharges from Washing Vehicles, Pavement, Buildings, etc. to Land
- 2.II.F. Specific Waiver Conditions for Discharges from Irrigated Lawns and Landscaping Using Groundwater or Municipal Supply Water
- 2.II.G. Specific Waiver Conditions for Discharges from Structural BMPs that Require Infiltration

“Low threat” discharges to land that comply with the general and specific waiver conditions in Conditional Waiver No. 2 are not expected to pose a threat to the quality of waters of the state.

**2.I.A. General Waiver Conditions for “Low Threat” Discharges of Water to Land**

1. Prevent the direct or indirect discharge of “low threat” discharges to any surface waters of the state (including ephemeral streams and vernal pools).
2. “Low threat” discharges must not cause the migration of contaminants such as chlorinated solvents, hydrocarbons, or other toxic or hazardous substances to groundwater.
3. “Low threat” discharges must not come in contact with any material that consists of or is contaminated with chlorinated solvents, hydrocarbons, or other toxic or hazardous substances prior to discharge to land.
4. Any products used to condition or treat “low threat” discharges prior to discharging to land must be in accordance with manufacturer’s instructions and guidelines, and must reliably attenuate before infiltrating to underlying groundwater.
5. “Low threat” discharges to land must not adversely affect the quality or beneficial uses of underlying groundwater.
6. “Low threat” discharges to land must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
7. “Low threat” discharges to land must not adversely impact the quality or beneficial uses of groundwater in any water wells.
8. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
9. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

**2.II.A. Specific Waiver Conditions for Air Conditioner Condensate and Non-contact Cooling Water Discharges to Land**

1. Discharges must not contain contact cooling water.
2. Discharges of air conditioner condensate and non-contact cooling water to land must not exceed an average of 1,200 gallons per day for any continuous 365-day period, unless the discharger has filed a Notice of Intent containing information about the operator, location, and planned period of and average daily volume of discharge.

**2.II.B. Specific Waiver Conditions for Swimming Pool Discharges to Land**

1. Discharges of water from each swimming pool to land must not exceed 50,000 gallons during any continuous 365-day period, unless the discharger has filed a Notice of Intent containing information about the swimming pool location and volume, planned period of and frequency of discharge.

**2.II.C. Specific Waiver Conditions for Pumping of Groundwater from Wells to Land**

1. The discharge of groundwater pumped from any well that is used in a soil and/or groundwater contamination investigation or corrective action may not be discharged to land, unless the discharger has filed a Notice of Intent containing monitoring data demonstrating that the quality of the proposed discharge would not cause the groundwater at the disposal site to exceed water quality objectives.



2. For multiple applications of groundwater from wells pumped to land over a 365-day period, or a continuous 24-hour (or longer) application of groundwater from wells pumped to land within a 365-day period, the discharger must file a Notice of Intent containing information about the operator, location, planned period of and frequency of discharge, and measures that will be taken to minimize or eliminate the discharge of pollutants that might affect surface water and groundwater quality. Sufficient information demonstrating compliance with waiver conditions must be submitted before the discharge may begin.
3. Groundwater cannot originate from an area that contains any contaminated soil or groundwater.

**2.II.D. Specific Waiver Conditions for Dewatering Operations Discharged to Land**

1. The discharge of groundwater pumped from any well or excavation that is used in a soil and/or groundwater contamination investigation or corrective action may not be discharged to land, unless the discharger has filed a Notice of Intent containing monitoring data demonstrating that the quality of the proposed discharge would not cause the groundwater at the disposal site to exceed water quality objectives.
2. For dewatering operations that discharge an average of 5,000 gallons per day for any continuous 180-day period, the discharger must file a Notice of Intent containing information about the operator, location, planned period and rate of discharge, and measures that will be taken to minimize or eliminate the discharge of pollutants that might affect groundwater quality. Sufficient information demonstrating compliance with waiver conditions must be submitted before the discharge may begin.
3. Groundwater cannot originate from an area that contains any contaminated soil or groundwater.

**2.II.E. Specific Waiver Conditions for Discharges from Washing Vehicles, Pavement, Buildings, etc. to Land**

1. Discharges of wash water and similar intermittent discharges must not exceed an average of 1,200 gallons per day for any continuous 30-day period, unless the discharger has filed a Notice of Intent containing information about the operator, location, and planned period of and average daily volume of discharge.

**2.II.F. Specific Waiver Conditions for Discharges from Irrigated Lawns and Landscaping Using Groundwater or Municipal Supply Water**

1. Products applied to lawns and landscaping must be in accordance with manufacturer's instructions and guidelines, and must reliably attenuate before infiltrating to underlying groundwater.

**2.II.G. Specific Waiver Conditions for Discharges from Structural BMPs that Require Infiltration.**

1. Installation of structural BMP that utilizes infiltration must comply with the design criteria of the municipality regulated by MS4 WDRs (NPDES storm water permit), or, for any discharge that exceeds an average of 1,200 gallons per day for any continuous 365-day period, the discharger must file a Notice of Intent containing documentation demonstrating that the quality of the proposed discharge from infiltration will not cause the groundwater at the disposal site to exceed water quality objectives.

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2. Installation of structural BMPs that require infiltration must comply with local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.

### **CONDITIONAL WAIVER NO. 3 – DISCHARGES FROM ANIMAL OPERATIONS**

Conditional Waiver No. 3 is for discharges from animal operations, which contain pollutants that can percolate to groundwater or runoff to surface waters. Discharges from animal operations include discharges resulting from animal activities and wastes, and storm water runoff which can also transport pollutants from animal operations to surface waters and groundwater.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 3:

- Discharges from small animal feeding operations (less than 300 animal units, where 1 animal unit is equivalent to one cow or 1,000 animal pounds)
- Discharges from medium animal feeding operations (300 to 999 animal units)
- Discharges of storm water runoff
- Discharges of manure to compost operations
- Discharge/application of manure to soil as an amendment or mulch
- Discharges from grazing lands

In order to be eligible for Conditional Waiver No. 3, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges from animal operations include the following:

- 3.I.A. General Facility Design and Management Waiver Conditions
- 3.I.B. General Manure Management Waiver Conditions
- 3.I.C. General Waiver Conditions for Application of Manure from Animal Operations as a Fertilizer, Amendment, or Mulch to Soil
- 3.I.D. General Inspection and Reporting Waiver Conditions
- 3.II.A. Specific Waiver Conditions for Small Animal Feeding Operations
- 3.II.B. Specific Waiver Conditions for Medium Animal Feeding Operations
- 3.II.C. Specific Waiver Conditions for Grazing Operations

Discharges from animal operations that comply with the general and specific waiver conditions in Conditional Waiver No. 3 are not expected to pose a threat to the quality of waters of the state.

#### **3.I.A. General Facility Design and Management Waiver Conditions**

1. Animal operations must comply with any local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.
2. Animal operations must implement management measures (MMs) and/or best management practices (BMPs) to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are provided in *Equestrian-Related Waste Quality Best Management Practices* available from the County of San Diego Department of Agriculture, Weights and Measures, and/or the *Field Office Technical Guide*

available from the Natural Resource Conservation Service (NRCS), or other sources.

3. Animal operations must prevent direct contact of animals with surface water bodies. Animals should not be allowed to graze directly adjacent to or within stream banks. Animal operations should maintain a buffer zone or riparian filter strip between the animals and any surface waters of the state. The buffer zone must adequately minimize the discharge of pollutants from an animal operation. There should be no direct exposure of a surface water body to an animal.

### **3.I.B. General Manure Management Waiver Conditions**

1. Animal operations must prevent the direct or indirect discharge of animal wastes (manure, urine, soiled bedding) to any surface waters of the state (including ephemeral streams and vernal pools).
2. Animal operations must properly manage the wastes (i.e., manure, urine, soiled bedding) generated by the animals at the facility in accordance with the following guidelines:
  - a) Animal wastes should be collected and disposed of regularly (at least once every two weeks).
  - b) Animal wastes can be stored temporarily (no longer than two weeks) on site until disposal, unless animal wastes are composted on site. The amount of animal wastes stored in temporary storage area must not exceed the capacity of the storage area. If animal wastes exceed, or threaten to exceed the capacity of the temporary storage area, the animal wastes should be disposed of immediately.
  - c) Areas adjacent to temporary storage area for animal wastes should be graded to prevent storm water and surface runoff from reaching the storage area.
  - d) Temporary storage area should be on an impervious surface (e.g., concrete pad or plastic tarp) to prevent leaching of pollutants to groundwater.
  - e) Temporary storage area should be protected with a roof or cover, or at a minimum be covered with plastic sheeting if precipitation is forecast within the next 24 hours, to prevent direct contact between precipitation and animal wastes.
  - f) A buffer zone of at least 100 feet should be maintained between the temporary storage area for animal wastes and any surface water body unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
  - g) If animal wastes are used as a fertilizer, soil amendment, or mulch on grazing lands, application of animal wastes to soil must comply with the conditions in 3.I.C.

### **3.I.C. General Waiver Conditions for Application of Manure from Animal Operations as a Fertilizer, Amendment, or Mulch to Soil**

1. If fresh and/or uncomposted manure is applied as a fertilizer, amendment, or mulch to soil, manure must be applied to the same property where the manure was generated.
2. Dried, processed, or composted manure may be applied as a fertilizer, amendment, or mulch to soil on sites other than the property where the manure was generated. Dried, processed, or composted manure may also be applied as a fertilizer, amendment, or mulch to soil on the same property where the manure was

- generated. Use of dried, processed, or composted manure on or off the property where the manure was generated must comply with the waiver conditions in 3.I.D.
3. A buffer zone of at least 100 feet should be maintained between the manure applied to soil and any surface waters of the state, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
  4. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the NRCS, University of California Cooperative Extension (UCCE), and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.
  5. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
  6. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

**3.I.D. General Inspection and Reporting Waiver Conditions**

1. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
2. Animal operations must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

**3.II.A. Specific Waiver Conditions for Small Animal Feeding Operations**

1. Small animal feeding operations (AFOs) must not discharge any pollutants to waters of the United States through any man-made conveyance, or directly to waters of the United States which originate outside of and pass over, across or through the facility or otherwise come into direct contact with the animals confined in the operation.
2. Small AFOs must be operated and maintained in accordance with the regulations in California Code of Regulations Title 27 sections 22562 through 22565.

**3.II.B. Specific Waiver Conditions for Medium Animal Feeding Operations**

1. Medium AFOs must not discharge any pollutants to waters of the United States through any man-made conveyance, or directly to waters of the United States which originate outside of and pass over, across or through the facility or otherwise come into direct contact with the animals confined in the operation.
2. Medium AFOs must be operated and maintained in accordance with the regulations in California Code of Regulations Title 27 sections 22562 through 22565.
3. Medium AFO facility owners or operators must file a Notice of Intent with the San Diego Water Board containing, at a minimum, the following information:
  - a) Property owner name and address
  - b) AFO owner/operator name and address
  - c) Number and types of animals
  - d) Map of the AFO facility showing the locations of manure stockpiles, nearby surface water bodies, and/or water wells

- e) Description of existing and planned MMs/BMPs for the prevention of erosion and discharges of animal wastes that could affect the quality of waters of the state. Sufficient information demonstrating compliance with general and specific waiver conditions must be submitted in order for the medium AFO facility to be eligible for a conditional waiver.

**3.II.C. Specific Waiver Conditions for Grazing Operations**

1. Grazing operations must manage grazing fields to allow lands to revegetate and minimize topsoil erosion.
2. Owners of pasture and range lands used for grazing, must implement MMs/BMPs to minimize or eliminate any discharge that could adversely affect the quality or beneficial uses of waters of the state.

**List of References**

The following list of references provides additional information that is available regarding appropriate MMs/BMPs for minimizing pollutants in runoff and other discharges from animal operations.

1. Equestrian-Related Waste Quality Best Management Practices, County of San Diego Department of Agriculture, Weights and Measures  
[http://www.sdcounty.ca.gov/awm/docs/equestrian\\_bmp.pdf](http://www.sdcounty.ca.gov/awm/docs/equestrian_bmp.pdf)
2. Electronic Field Office Technical Guide (eFOTG), United States Department of Agriculture, Natural Resources Conservation Service  
<http://www.nrcs.usda.gov/technical/efotg/>
3. Agricultural Management Measures, State Water Resources Control Board  
<http://www.swrcb.ca.gov/nps/docs/guidance/agricmms.pdf>
4. California Nonpoint Source Encyclopedia, State Water Resource Control Board  
<http://www.swrcb.ca.gov/nps/docs/encyclopedia/agriculture.pdf>

## **CONDITIONAL WAIVER NO. 4 – DISCHARGES FROM AGRICULTURAL AND NURSERY OPERATIONS**

Conditional Waiver No. 4 is for discharges from agricultural and nursery operations, which contain pollutants that can percolate to groundwater or runoff to surface waters. Discharges from agricultural and nursery operations include discharges resulting from growing operations, irrigation return flows, and storm water runoff which can also transport pollutants from agricultural and nursery operations to surface waters and groundwater.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 4:

- Discharges of plant crop residues to land
- Discharges of storm water runoff
- Discharge/application of amendments or mulches to soil
- Discharges of agricultural irrigation return water
- Discharges of nursery irrigation return water

In order to be eligible for Conditional Waiver No. 4, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges from agricultural and nursery operations include the following:

4.I.A. General Facility Design and Management Waiver Conditions

4.I.B. General Enrollment and Education Waiver Conditions

4.I.C. General Waiver Conditions for Application of Compost as a Fertilizer, Amendment, or Mulch to Soil

4.I.D. General Waiver Conditions for Application of Products Used in Agricultural and Nursery Operations

4.I.E. General Inspection and Reporting Requirements

4.II.A. Specific Waiver Conditions for Agricultural Operations

4.II.B. Specific Waiver Conditions for Nursery Operations

Discharges from agricultural and nursery operations that comply with the general and specific waiver conditions in Conditional Waiver No. 4 are not expected to pose a threat to the quality of waters of the state.

### **4.I.A. General Facility Design and Management Waiver Conditions**

1. Agricultural and nursery operations must comply with any local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses.
2. Agricultural and nursery operations must implement management measures (MMs) and/or best management practices (BMPs) to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are available in the State Water Board's Nonpoint Source (NPS) Program Plan and/or available from University of California

Cooperative Extension (UCCE), Natural Resources Conservation Service (NRCS), and/or regional resource conservation districts (RCDs).

**4.I.B. General Enrollment and Education Waiver Conditions**

1. Agricultural and nursery operators must perform a self assessment to identify the pollutants present on the site and assess the potential for runoff and/or infiltration to adversely affect the quality or beneficial uses of the waters of the state. Annual self assessments must be available on site for inspection. If an agricultural or nursery operator does not have proof available during an inspection, the operator must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection. Self assessment questionnaires are available from the UCCE.
2. Agricultural and nursery operators must complete at least 2 hours of water quality management related training annually. Training may include formal classroom training or meetings with a training component. Proof of training must be available on site for inspection. Agricultural and nursery operators who do not have proof available during an inspection must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection.
3. Agricultural and nursery operators must be in regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs so they can be informed of the latest MMs/BMPs and developments with water quality issues. Proof of contact (e.g., newsletter addressed to facility, NRCS conservation plan, UCCE self assessment) must be available on site for inspection. Agricultural and nursery operators who do not have proof available during an inspection must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection.
4. Agricultural and nursery operations must implement MMs/BMPs to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are available in the State Water Board's NPS Program Plan and/or available from UCCE, NRCS, and/or regional RCDs.
5. Agricultural and nursery operators shall maintain records pertaining to the water quality management efforts for the operation. The records shall include the following information:
  - a) Site map showing locations of MMs/BMPs and nearby surface water bodies and/or water wells
  - b) List of hazardous materials kept on the property
  - c) Location and amount of waste materials (e.g., green wastes, trash) generated and composted and/or reused on site, or disposed of off site
  - d) Pesticide use reports and records
  - e) Fertilizer, soil amendment, and mulch use records
  - f) Irrigation management records (i.e., water use, irrigation system, irrigation schedule, etc.)
  - g) Equipment maintenance records
  - h) List of MMs/BMPs implemented to minimize and/or eliminate runoff to surface waters and/or infiltration to groundwater
  - i) Owner, operator, and employee education and training records
  - j) Inspection reports
  - k) Self assessments



- l) Contacts with Farm Bureau, UCCE, NRCS, regional RCDs, and/or other organizations
  - m) Copies of any permits, licenses, and certifications required for the operation
  - n) Water quality monitoring data (if any)
- Recommended water quality record keeping documentation is available from the UCCE. Water quality management records must be available on site for inspection.
- 6. **No later than December 31, 2010**, agricultural and nursery operations must form or join a monitoring group. The function of the monitoring group is to perform water quality monitoring and report the results to the San Diego Water Board. Monitoring groups will be allowed to divide the costs associated with the water quality monitoring and reporting requirements in 4.I.F among its members. Individual operations not in a monitoring group will be solely responsible for the costs associated with the water quality monitoring and reporting requirements in 4.I.F.
  - 7. **No later than January 1, 2011**, owners/operators of agricultural and nursery operations must file a Notice of Intent, as either an individual operation or as part of a monitoring group, with the San Diego Water Board.
  - 8. A Notice of Intent submitted by a monitoring group on behalf of its members must contain the following information:
    - a) Identify the representative(s) authorized to sign reports submitted on behalf of the group.
    - b) An electronic list of landowners and/or operators participating in the monitoring group including: (a) assessor parcel number(s), (b) parcel size, (c) parcel owner or operator name, (d) types of crops grown on each parcel, (e) number of irrigated acres, and (f) parcel owner or operator mailing address.
    - c) A detailed map of the area included within the monitoring group, preferably in GIS format, identifying individual parcels and/or districts that are participating in the monitoring group.
    - d) A detailed description of irrigation, storm water runoff, nutrient, pesticide, erosion control, composting, and other site-specific MMs/BMPs that have been implemented by each participant in the monitoring group, which must be provided as a written description, on a map, and/or using pictures.

Monitoring group members are not eligible for this waiver until a complete Notice of Intent is filed. The monitoring group must inform the San Diego Water Board when any member ceases to participate in the monitoring group within 30 days of the cessation of participation. Any member who ceases to participate in a monitoring group must file a Notice of Intent as an individual agricultural or nursery operation, in accordance with waiver condition 4.I.B.9, within 30 days of ceasing to participate in the monitoring group.
  - 9. A Notice of Intent filed by an individual agricultural or nursery operation must contain the following information:
    - a) Information about the agricultural or nursery operation including: (a) assessor parcel number(s), (b) parcel size, (c) parcel owner and operator name(s), (d) types of crops grown on each parcel, (e) number of irrigated acres, and (f) parcel owner and operator mailing address(es).
    - b) A detailed map of the operation, preferably in GIS format, with locations of operation boundaries, nearby surface waters and water wells.
    - c) A detailed description of irrigation, storm water runoff, nutrient, pesticide, erosion control, composting, and other site-specific MMs/BMPs that have been

implemented by the operation, which must be provided as a written description, on a map, and/or using pictures.  
An individual agricultural or nursery operation is not eligible for this waiver until a complete Notice of Intent is filed.

**4.I.C. General Waiver Conditions for Application of Compost as a Fertilizer, Amendment, or Mulch to Soil**

1. Prevent the direct or indirect discharge of amendments or mulches to any surface waters of the state (including ephemeral streams and vernal pools).
2. Plant crop residues may be utilized as soil amendment or mulch.
3. Amendments or mulches applied to soil cannot include any of the following additives, unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.
4. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the NRCS, UCCE, and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.
5. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
6. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

**4.I.D. General Waiver Conditions for Application of Products Used in Agricultural and Nursery Operations**

1. Prevent the direct or indirect discharge of products used in agricultural or nursery operations to any surface waters of the state (including ephemeral streams and vernal pools).
2. The application of any products used in agricultural or nursery operations that contain pollutants that may be transported in surface runoff to surface waters or may infiltrate to groundwater must be applied in accordance with manufacturer instructions and guidelines, and must not have an adverse effect on the quality of any waters of the state.
3. Excessive amounts of any products used in agricultural or nursery operations spilled to land must be contained and properly disposed.
4. Any products used in agricultural or nursery operations applied to land must not adversely impact the quality or beneficial uses of groundwater in any water wells.

**4.I.E. General Inspection and Reporting Waiver Conditions**

1. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
2. Owners/operators must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.
3. By March 31, 2011, each monitoring group and each individual operation not participating in a monitoring group must contact the San Diego Water Board to begin developing a Monitoring and Reporting Program Plan (MRPP) and a Quality Assurance Project Plan (QAPP).
4. By January 1, 2012, each monitoring group and each individual operation not in a monitoring group must submit one MRPP/QAPP to the San Diego Water Board. The MRPP/QAPP must include the monitoring locations, frequency of monitoring, constituents of concern to be monitored, documentation of monitoring protocols, and sufficient information about the agricultural and/or nursery operations to demonstrate that the proposed MRPP/QAPP will adequately document water quality and pollutant loadings, and demonstrate compliance with waiver conditions.
5. By December 31, 2012, each monitoring group and each individual operation not participating in a monitoring group must submit one Monitoring Program Report (MRP) to the San Diego Water Board consistent with the MRPP/QAPP.

**4.II.A. Specific Waiver Conditions for Agricultural Operations**

1. Minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of any waters of the state.
2. Agricultural operators cannot alter surface waters of the state on or off the property, unless the proposed alteration has received a Clean Water Act section 401 Water Quality Certification, individual WDRs, or individual waiver from the San Diego Water Board.

**4.II.B. Specific Waiver Conditions for Nursery Operations**

1. Prevent the direct or indirect discharge of nursery irrigation return water to any surface waters of the United States.
2. Nursery operations must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of any waters of the state.
3. Nursery operators cannot alter surface waters of the state on or off the property, unless the proposed alteration has received a Clean Water Act section 401 Water Quality Certification, individual WDRs, or individual waiver from the San Diego Water Board.

**List of References**

The following list of references provides additional information that is available regarding appropriate MMs/BMPs for minimizing pollutants in runoff and other discharges from agricultural and nursery operations.

1. Industrial Storm Water Program, State Water Resources Control Board  
<http://www.swrcb.ca.gov/stormwtr/industrial.html>
2. Construction Storm Water Permit, State Water Resources Control Board  
[http://www.swrcb.ca.gov/stormwtr/gen\\_const.html](http://www.swrcb.ca.gov/stormwtr/gen_const.html)

3. Agricultural Management Measures, State Water Resources Control Board  
<http://www.swrcb.ca.gov/nps/docs/guidance/agricmms.pdf>
4. California Nonpoint Source Encyclopedia, State Water Resource Control Board  
<http://www.swrcb.ca.gov/nps/docs/encyclopedia/agriculture.pdf>
5. Developing a Management Plan for Irrigation Runoff, Dept. of Horticultural Sciences,  
Texas A&M University [http://aggie-](http://aggie-horticulture.tamu.edu/greenhouse/nursery/environ/wmplan1.html)  
[horticulture.tamu.edu/greenhouse/nursery/environ/wmplan1.html](http://aggie-horticulture.tamu.edu/greenhouse/nursery/environ/wmplan1.html)
6. Management Options for Nonpoint Source Pollution for Greenhouse and Container  
Crops, UC Cooperative Extension, San Diego  
<http://commserv.ucdavis.edu/CESanDiego/Stormwater/index.htm>
7. BMPs Nurseries And Greenhouses, County of Orange  
[http://www.ocwatershed.com/StormWater/documents\\_bmp\\_existing\\_development.asp#in](http://www.ocwatershed.com/StormWater/documents_bmp_existing_development.asp#ind)  
[d](http://www.ocwatershed.com/StormWater/documents_bmp_existing_development.asp#ind)
8. Electronic Field Office Technical Guide (eFOTG), Natural Resources Conservation  
Service <http://www.nrcs.usda.gov/technical/efotg/>
9. Grower Resources (including self assessment questionnaires and water quality record  
keeping notebook), San Diego County University of California Cooperative Extension  
[http://cesandiego.ucdavis.edu/Clean%5FWater/Grower\\_Resources.htm](http://cesandiego.ucdavis.edu/Clean%5FWater/Grower_Resources.htm)

## **CONDITIONAL WAIVER NO. 5 – DISCHARGES FROM SILVICULTURAL OPERATIONS**

Conditional Waiver No. 5 is for discharges that originate from forest lands, which contains pollutants that can percolate to groundwater or runoff to surface waters. Discharges from forest lands include discharges resulting from timber operations, and storm water runoff which can also transport pollutants from managed forest lands and timber operations to surface waters and groundwater.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 5:

- Discharges of storm water runoff
- Discharges from timber harvesting projects
- Discharges from wildfire suppression and fuels management activities

In order to be eligible for Conditional Waiver No. 5, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges from silvicultural operations include the following:

### 5.I.A. General Waiver Conditions for Silvicultural Operations

### 5.II.A. Specific Waiver Conditions for Timber Operations on Federal Lands

### 5.II.B. Specific Waiver Conditions for Timber Operations on Non-Federal Lands

Discharges from silvicultural operations that comply with the general and specific waiver conditions in Conditional Waiver No. 5 are not expected to pose a threat to the quality of waters of the state.

### **5.I.A. General Waiver Conditions for Silvicultural Operations**

1. Silvicultural operations (including timber harvesting, timber management, vegetative manipulation, fuels management, road construction, and watershed management) must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
2. Silvicultural operations (including timber harvesting, timber management, vegetative manipulation, fuels management, road construction, and watershed management) must comply with any federal, state, or local, state, and federal permitting, licensing, or certification requirements and applicable regulations and ordinances.
3. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.

**5.II.A. Specific Waiver Conditions for Timber Operations on Federal Lands**

1. The State Water Board and US Environmental Protection Agency (USEPA) must continue to certify the *Water Quality Management Plan for National Forest System Lands in California*.
2. The US Forest Service (USFS) must maintain: (a) a water quality program consistent with the Basin Plan, and (b) a program to monitor the implementation and effectiveness of management measures (MMs) and/or best management practices (BMPs).
3. The USFS must provide the San Diego Water Board copies of the environmental and decision documents containing information documenting that a multi-disciplinary review of the timber harvest proposal has been conducted, and the proposed MMs/BMPs and additional control measures that will be implemented to protect water quality.
4. The USFS must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

**5.II.B. Specific Waiver Conditions for Timber Operations on Non-Federal Lands**

1. The State Water Board must continue to certify the *Water Quality Management Plan for Timber Operations on Nonfederal Lands*.
2. Timber operations within 150 feet of existing structures (i.e., "FireSafe" treatments) that are conducted pursuant to a Notice of Exemption approved by the California Department of Forestry (CDF) are not required to provide notice to the San Diego Water Board, but must keep a copy of the approved Notice of Exemption for at least one year (from the approval date) on site for inspection.
3. For timber operations approved by the CDF pursuant to a Notice of Exemption or Notice of Emergency, a copy of the notice must be provided to the San Diego Water Board.
4. For timber operations with a Timber Harvest Plan (THP) or Non-industrial Timber Management Plan (NTMP) approved by the CDF, a copy of the Plan must be provided to the San Diego Water Board.
5. Owners/operators of non-federal forest lands must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

## **CONDITIONAL WAIVER NO. 6 – DISCHARGES OF DREDGED OR FILL MATERIALS NEARBY OR WITHIN SURFACE WATERS**

Conditional Waiver No. 6 is for discharges of dredged or fill materials nearby or within surface waters of the state. Dredged or fill materials are sources of pollutants that can adversely affect the quality of waters of the state.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 6:

- Discharges from sand and gravel mining operations
- Discharges from dredging projects
- Discharges from stream channel alteration projects
- Other projects proposing to discharge dredged or fill materials nearby or within surface waters of the state.

In order to be eligible for Conditional Waiver No. 6, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges of dredged or fill materials nearby or within surface waters include the following:

6.I.A. General Waiver Conditions for Projects that Discharge Dredged or Fill Material Nearby or Within Surface Waters Required to Obtain a Surface Mining Permit and/or Federal Permit (River and Harbors Act Section 10 or Clean Water Act Section 404 Permit), and Clean Water Act Section 401 Water Quality Certification

6.II.A. Specific Waiver Conditions for Sand and Gravel Mining Operations

Discharges of dredged or fill materials nearby or within surface waters that comply with the general and specific waiver conditions in Conditional Waiver No. 6 are not expected to pose a threat to the quality of waters of the state.

### **6.I.A. General Waiver Conditions for Projects that Discharge Dredged or Fill Material Nearby or Within Surface Waters Required to Obtain a Surface Mining Permit and/or Federal Permit (River and Harbors Act Section 10 or Clean Water Act Section 404 Permit) and Clean Water Act Section 401 Water Quality Certification<sup>4</sup>**

1. Operators must comply with measures included in the Surface Mining Permit and/or Federal Permit and Clean Water Act section 401 Water Quality Certification to protect surface water and groundwater quality.
2. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
3. At least one copy of any permits, licenses, and certifications must be available for on site inspection.

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<sup>4</sup> For projects that discharge dredged or fill material nearby or within surface waters NOT required to obtain a Surface Mining Permit or Federal Permit (River and Harbors Act section 10 or Clean Water Act section 404 Permit) and Clean Water Act section 401 Water Quality Certification, the discharger must file a Report of Waste Discharge (RoWD) with the San Diego Water Board.

4. Operators must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.

**6.II.A. Specific Waiver Conditions for Sand and Gravel Mining Operations**

1. Sand and gravel mining operations cannot be conducted in flowing streams or other water bodies.



**CONDITONAL WAIVER NO. 7 – DISCHARGES OF RECYCLED WATER TO LAND**

Conditional Waiver No. 7 is for discharges of recycled water to land. Discharges of recycled water may contain pollutants that can adversely affect the quality of waters of the state. The application of recycled water to land may result in pollutants being concentrated in soils, which may adversely impact the quality of the waters of the state when those concentrated pollutants are leached out during rainfall events and/or overuse of irrigation water. This waiver is not available or applicable to recycled water projects and users subject to rules and regulations established by master reclamation permits (MRPs), issued pursuant to Water Code section 13523.1, or otherwise regulated under waste discharge requirements (WDRs) or water reclamation requirements (WRRs), issued pursuant to Water Code sections 13260 and 13523, respectively.

The following types of discharge not regulated or authorized under WDRs, WRRs, and/or MRP may be eligible for Conditional Waiver No. 7:

- Discharges to land from short-term recycled water projects (without permanent recycled water delivery and/or distribution systems, not to exceed 365 days)
- Discharges to land from permanent recycled water projects (with permanent recycled water delivery and/or distribution systems, limited to the period prior to the discharge being authorized and regulated under WDRs, WRRs, and/or MRP, not to exceed 365 days)

In order to be eligible for Conditional Waiver No. 7, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges of recycled water to land include the following:

7.I.A. General Waiver Conditions for Recycled Water Projects

7.II.A. Specific Waiver Conditions for Short-term Recycled Water Projects

7.II.B. Specific Waiver Conditions for Permanent Recycled Water Projects

Discharges of recycled water to land that comply with the general and specific waiver conditions in Conditional Waiver No. 7 are not expected to pose a threat to the quality of waters of the state.

**7.I.A. General Waiver Conditions for Recycled Water Projects**

1. Prevent all windblown spray and surface runoff of recycled water on to property not owned or controlled by the discharger by implementation of management measures (MMs) and/or best management practices (BMPs).
2. Recycled water discharged to land must not adversely affect the quality or beneficial uses of underlying groundwater.
3. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
4. The use of recycled water must comply with the requirements of California Code of Regulations Title 22 section 60310(a) through (j), unless sufficient information is

provided to demonstrate that a proposed alternative is protective of water quality and human health.

5. Recycled water cannot be used for groundwater recharge unless sufficient information is provided to demonstrate that it will be protective of water quality and human health.

#### **7.II.A. Specific Waiver Conditions for Short-term Recycled Water Projects**

1. The operator of a short-term project proposing to discharge recycled water must file a Notice of Intent containing information about the operator, location of the project, source of the recycled water, planned period of and frequency of discharge of recycled water, and the MMs/BMPs or other measures that will be taken to eliminate or minimize the discharge of pollutants that might affect surface water and groundwater quality.
2. The Notice of Intent must include a letter from the permitted recycled water agency supplying the recycled water stating that the project will comply with recycled water regulations in California Code of Regulations Title 22, Division 4, Chapter 3, Articles 1 through 10. The letter shall also specify any monitoring and/or reporting required by the recycled water agency to demonstrate compliance with California Code of Regulations Title 22, Division 4, Chapter 3, Reclamation Criteria, Articles 2, 3, 4, 5, and 5.1.
3. Sufficient information demonstrating that the operator will comply with waiver conditions and applicable recycled water regulations must be submitted before the discharge may begin.
4. The Notice of Intent is valid for 365 days after the submittal of a complete Notice of Intent. A new Notice of Intent must be filed with the San Diego Water Board if the short-term project will exceed 365 days. A new Notice of Intent must be received by the San Diego Water Board at least 60 days prior to the expiration of the previous Notice of Intent. If no new Notice of Intent is received 60 days prior to the expiration of the previous Notice of Intent, the short-term recycled water project must cease operation 365 days after a complete Notice of Intent has been submitted.

#### **7.II.B. Specific Waiver Conditions for Permanent Recycled Water Projects**

1. A recycled water agency proposing to supply and/or distribute recycled water through permanently installed facilities or structures before receiving WDRs must file a Report of Waste Discharge (RoWD) pursuant to Water Code sections 13260 and 13522.5 containing the following:
  - a) Sufficient information for the San Diego Water Board to determine that the project will be consistent with the Water Quality Control Plan for the San Diego Basin and any State Water Resources Control Board recycled water policies, and will comply with all applicable recycled water regulations.
  - b) A letter from the California Department of Public Health (CDPH) stating that the project will comply with recycled water regulations in California Code of Regulations Title 22, Division 4, Chapter 3, Articles 1 through 10. The letter shall also specify any provisions, monitoring, and/or reporting required by the CDPH to demonstrate compliance with California Code of Regulations Title 22, Division 4, Chapter 3, Reclamation Criteria, Articles 2, 3, 4, 5, and 5.1.
  - c) A list of recycled water end users that will be regulated by the recycled water agency, and the proposed monitoring and reporting program the recycled water

- agency will implement to demonstrate that the end users are complying with the waiver conditions and applicable recycled water regulations.
2. The recycled water agency must submit sufficient information demonstrating that the recycled water agency and its end users will comply with waiver conditions and applicable recycled water regulations before the discharge may begin.
  3. The conditional waiver issued to the recycled water agency is valid for 365 days after a completed RoWD has been submitted, or until WDRs are adopted for the project, whichever occurs first. The San Diego Water Board will adopt WDRs at the earliest possible opportunity. If the WDRs cannot be adopted within 365 days after the completed RoWD has been submitted, the recycled water agency must request an extension of the conditional waiver at least 60 days prior to the expiration of the previous conditional waiver. If no request for an extension is received 60 days prior to the expiration of the previous conditional waiver, the permanent recycled water project must cease the discharge of recycled water 365 days after the completed RoWD was submitted.
  4. If a recycled water agency that obtains a waiver in accordance with the waiver conditions in 7.II.B proposes to significantly add to or modify the treatment process (e.g., change the disinfection or filtration processes), then the discharger shall submit a new RoWD containing the information listed in 7.II.B.1 above.

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**CONDITIONAL WAIVER NO. 8 – DISCHARGES/DISPOSAL OF SOLID WASTES TO LAND**

Conditional Waiver No. 8 is for discharges of solid wastes to land, which may be a source of pollutants that can adversely affect the quality of waters of the state.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 8:

- Discharges of plant crop residues to land
- Discharge/application of amendments and/or mulches to soil
- Discharges/disposal of inert wastes to solid waste disposal facilities only accepting inert wastes
- Discharges of soils containing wastes to temporary waste piles
- Discharges/disposal/reuse of soils characterized as inert from known contaminated sites to land

In order to be eligible for Conditional Waiver No. 8, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges of solid wastes to land include the following:

- 8.I.A. General Waiver Conditions for Discharges of Solid Wastes to Land
- 8.II.A. Specific Waiver Conditions for Discharges of Plant Crop Residues to Land
- 8.II.B. Specific Waiver Conditions for Application of Amendments and Mulches to Soil
- 8.II.C. Specific Waiver Conditions for the Discharge of Soils Containing Wastes to Temporary Waste Piles
- 8.II.D. Specific Waiver Conditions for Discharges of Inert Wastes to Solid Waste Disposal Facilities Only Accepting Inert Wastes
- 8.II.E. Specific Waiver Conditions for the Discharge/Disposal/Reuse of Inert Soils and Materials from Contaminated Sites to Land

Discharges of solid wastes to land that comply with the general and specific waiver conditions in Conditional Waiver No. 8 are not expected to pose a threat to the quality of waters of the state.

**8.I.A. General Waiver Conditions for Discharges of Solid Wastes to Land**

1. Prevent the direct or indirect discharge of solid wastes to any surface waters of the state (including ephemeral streams and vernal pools).
2. Operations or facilities that accept and/or discharge solid wastes to land must comply with local, state, and federal ordinances and regulations and obtain any required permits, certifications, and/or licenses.
3. Solid wastes must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
4. The discharger must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
5. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.

6. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

**8.II.A. Specific Waiver Conditions for Discharges of Plant Crop Residues to Land**

1. Plant crop residues must be managed to prevent transport of pollutants to waters of the state.
2. Plant crop residues may be used as feedstock for composting.
3. Plant crop residues cannot be burned and applied to land.
4. Application of any products (e.g., fertilizers, pesticides) to plants or soil must be used in accordance with manufacturer's guidelines and must not have an adverse effect on the quality of any waters of the state.
5. Concentrations of pesticides and/or herbicides or any other pollutants associated with the plant crop residues must not adversely affect the quality or beneficial uses of underlying groundwater.
6. Implement management measures (MMs) and/or best management practices (BMPs) around areas where plant crop residues have been discharged to land to minimize or eliminate runoff and leachate to surface waters and groundwater.

**8.II.B. Specific Waiver Conditions for Application of Amendments and Mulches to Soil**

1. Amendments or mulches applied to soil cannot include any of the following additives, unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.
2. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the Natural Resource Conservation Service (NRCS), University of California Cooperative Extension (UCCE), and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.
3. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
4. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

**8.II.C. Specific Waiver Conditions for the Discharge of Soils Containing Wastes to Temporary Waste Piles**

1. For **any soils containing wastes** temporarily stored in waste piles, the following conditions apply:
  - a) The discharger must submit a signed/completed Section A of the Temporary Waste Pile Certification form within 30 days of the initial discharge of any waste piles to be eligible for this waiver. The property owner must approve and acknowledge the placement of the waste at the site.

- b) The discharger must submit a signed/completed Section B of the Temporary Waste Pile Certification form within 10 working days of completing removal of all waste and restoring the site to its original condition.
- c) Unless otherwise specified in the applicable conditions, no temporary waste piles may remain on a site for longer than 6 months or 180 days.
- d) The temporary discharge of waste must not (a) cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin; (b) cause the occurrence of objectionable tastes and odors in water pumped from basin; (c) cause waters pumped from the basin to foam; (d) cause the presence of toxic materials in waters pumped from the basin; (e) cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0; (f) cause pollution, contamination or nuisance or adversely affect the quality or beneficial uses of groundwater or surface waters of the hydrologic subareas established in the Basin Plan; and/or, (g) cause a violation of any discharge prohibitions in the Basin Plan for the San Diego Region.
- e) The discharger must conduct regular inspections of temporary waste piles and associated MMs/BMPs at least once per week. Corrective actions must be taken as necessary to ensure compliance with the conditions of this waiver.
- f) Surface drainage must be diverted away from the temporary waste piles. For all temporary waste piles, the discharger must implement effective MMs/BMPs to prevent surface water runon and runoff from contacting wastes and to prevent erosion and transport of wastes by surface runoff.
- g) Temporary waste piles must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from any surface water of the state, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
- h) Temporary waste piles must be protected against 100-year peak stream flows as defined by the County flood control agency.
- i) Temporary waste piles must be covered by plastic sheeting (not less than 10 mils thick, unless otherwise specified under the applicable Special Conditions) to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances.
- j) Temporary waste piles must be underlain by either plastic sheeting (not less than 10 mils thick, unless otherwise specified under the applicable conditions) or a liner of low permeability that will prevent leachate from infiltrating to groundwater.
- k) Solid wastes discharged to temporary waste piles, together with any containment materials used at the temporary waste pile, and any underlying geologic materials impacted by the discharge, shall be removed within 180 days, unless otherwise specified under the applicable Special Conditions. Subsequently, the discharger must remove all wastes, treatment facilities, related equipment, and dispose of those items in accordance with applicable regulations. The site must be restored to its original state within 30 days after the temporary waste pile is removed, unless otherwise specified under the applicable Special Conditions.
- l) The discharger must post at least one clearly visible sign listing the following minimum information: a) project name, b) name and address of discharger, c) brief project description, and d) 24-hour contact information – name, address, facsimile, and telephone number for the project for as long as the temporary waste pile remains on the site.

2. For **soils containing petroleum hydrocarbons** temporarily stored in waste piles, the following conditions apply:
  - a) Soils and associated solid waste containing petroleum hydrocarbons discharged into temporary waste piles shall be limited to a maximum time period of 3 months or 90 days on a site.
  - b) Soils and associated solid waste containing petroleum hydrocarbons discharged into temporary waste piles under an initial certification report must be derived from only one source (e.g., one unauthorized release site).
  - c) Temporary waste piles must be covered by plastic sheeting (not less than 10 mils thick) to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances.
  - d) Temporary waste piles must be underlain by either plastic sheeting (not less than 10 mils thick) or a liner of low permeability that will prevent leachate from infiltrating to groundwater.
  - e) In addition to the conditions stated herein, temporary waste piles must conform to applicable provisions in the state's local oversight program (LOP) for Orange, Riverside, or San Diego Counties.
  - f) The site must be restored to its original state within 30 days after removal of the temporary waste pile from the site.
3. For **dredged spoils containing heavy metals** temporarily stored in waste piles, the following conditions apply:
  - a) Dredged spoils and associated solid waste containing heavy metals discharged into temporary waste piles shall be limited to a maximum time period of 9 months or 270 days on a site.
  - b) Temporary waste piles must be covered by either a plastic sheeting to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances. Alternative control methods may be utilized if sufficient information is provided to demonstrate that the proposed alternative is protective of water quality and human health.
  - c) Temporary waste piles must be underlain by plastic sheeting (not less than 20 mils thick) or a liner of lower permeability that will prevent leachate from infiltrating to groundwater. Sufficient information must be provided to the San Diego Water Board demonstrating that the liner and containment facility has been designed to contain all solid wastes and fluids.
  - d) Materials used in containment structures must have the appropriate chemical and physical properties to ensure that such structures do not fail to contain waste because of: the stress of installation, pressure gradients, physical contact with the waste or leachate, or chemical reactions with soil and rock.
  - e) The site must be restored to its original state within 60 days after removal of the temporary waste pile from the site.

**8.II.D. Specific Waiver Conditions for Solid Waste Disposal Facilities Accepting Only Inert Wastes<sup>5</sup>**

1. Inert solid waste must not contain hazardous waste, or soluble or decomposable constituents to be considered inert waste.

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<sup>5</sup> According to California Code of Regulations Title 27 section 20230(a) "Inert waste" is defined as "that subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste."



2. Inert waste cannot contain any “free liquids.”<sup>6</sup>
3. Owner/operator of disposal facility must secure the disposal site and prevent unauthorized disposal by the public.
4. Inert wastes exclude any wastes determined by the San Diego Water Board to potentially have an adverse affect on the quality or beneficial uses of waters of the state, even if classified as inert waste.

**8.II.E. Specific Waiver Conditions for the Discharge/Reuse of Inert Soils and Materials from Contaminated Sites**

1. For **all waste soils characterized as inert (Tier 1 or Tier 2)**, the following conditions apply:
  - a) Inert waste soils from known contaminated sites cannot be transported off site and discharged/disposed/reused directly or indirectly to any surface waters of the state (including ephemeral streams and vernal pools).
  - b) Inert waste soils from known contaminated sites cannot contain significant quantities of decomposable waste.
  - c) Inert waste soils from known contaminated sites cannot contain any “free liquids.”<sup>7</sup>
  - d) Inert waste soils that are discharged/disposed/reused at any site cannot have any hydrocarbon, chlorinated solvent, or other contaminant-based odor.
  - e) Sites that export or import soils characterized as inert from known contaminated sites for use as fill material or any other purpose must comply with an applicable federal, state, or local permitting requirements, regulations, and/or ordinances pertaining to the use of imported soil.
  - f) Sites that export or import soils characterized as inert from known contaminated sites for use as fill material or any other purpose must implement MMs/BMPs to eliminate the potential for erosion and transport of sediment off the site.
  - g) This conditional waiver does not authorize the discharge/disposal/reuse of soil characterized as inert from known contaminated sites outside the boundaries of the San Diego Region.
  - h) Prior to exporting soil characterized as inert from a known contaminated site, the owner/operator of the export site must file a Notice of Intent with the San Diego Water Board. The Notice of Intent must be filed no less than 3 days prior to the beginning of export shipments. The Notice of Intent must include information about the site owner/operator, map of the site showing the locations of excavations, borings and/or stockpiles, MMs/BMPs that will be taken to prevent discharges of waste soil that could affect surface water and groundwater quality, estimated volumes (can be a range of volumes) of inert waste soil that will be generated for use off the site, estimated number (can be a range) and locations of samples that will be collected for characterization, and name of the certified environmental analytical laboratory that will perform the analysis.
  - i) Waste soils from a site with a known or discovered unauthorized release must be characterized and certified as inert in order for the soil to be reused off site. Characterization and certification must include the following minimum requirements:

<sup>6</sup> “Free liquids” defined by California Code of Regulations Title 27 section 20164 as “liquid which readily separates from the solid portions of waste under ambient temperature and pressure.”

<sup>7</sup> “Ibid.”

- i) All waste soils generated during remediation or corrective action must be stockpiled on the site in accordance with the waiver conditions for the discharge of specified soils containing wastes to temporary waste piles. Or, waste soils may be sampled and characterized in-situ prior to transport and disposal or reuse off site
- ii) Waste soil must be segregated into 2 categories:
  - (A) Soil that is impacted by the unauthorized release must be characterized as hazardous, designated, and/or non-hazardous waste and handled in accordance with regulatory requirements for the disposal of solid wastes. Waste soils that do not visually appear impacted, but smells impacted, must be treated as impacted soil and cannot be characterized as inert.
  - (B) Soil that does not appear to be impacted by the unauthorized release, by visual inspection and odor, must be sampled and analyzed to confirm the soil can be characterized as inert waste soil.
- iii) Samples must be collected from the waste soil suspected to be inert for laboratory analysis. The minimum number of samples required to characterize the soil is as follows:

| <u>Volume of Soil</u>      | <u>Required Number of Samples Analyzed</u>                     |
|----------------------------|--|
| <u>0 to &lt;500 cy</u>     | <u>4 samples per 100 cy (12 minimum)</u>                       |
| <u>500 to &lt;5,000 cy</u> | <u>1 additional sample per additional 500 cy</u>               |
| <u>5,000 cy or more</u>    | <u>1 additional sample per additional 1,000 cy<sup>8</sup></u> |

cy = cubic yards

- iv) Samples must be analyzed by a state-certified analytical laboratory using USEPA approved analytical methods for the following constituents:
  - (A) Total concentrations of those Title 22 metals identified as contaminants of concern for the export site. For sites identified with burn ash (i.e., a site where solid waste has been burned at low temperature and the residual burn ash pits and burn ash layers are present in soil), the site shall be investigated and the burn ash will be characterized for disposal purposes according to the protocol established by the lead regulatory agency (e.g., Department of Toxic Substances Control, California Integrated Waste Management Board, or others) to identify contaminants of concern at the site. The soil outside of the area of impact of the burn ash shall be tested for the total concentration of those metals identified as contaminants of concern based on the findings of the burn ash investigation technical study.
  - (B) Total petroleum hydrocarbons (by USEPA Method 8015 – full scan if export site includes oil or fuel as potential or actual contaminants of concern)
  - (C) Polychlorinated biphenyls (if export site includes PCBs as potential or actual contaminants of concern)

<sup>8</sup> Volumes greater than 10,000 cubic yards may rely on fewer samples than 1 per each additional 1,000 cubic yards if characterization complies with SW846 methods for selecting appropriate numbers of samples for waste characterization and statistical analyses. The appropriate number of samples is the least number of samples required to generate a sufficiently representative estimate of the true mean concentration of a chemical contaminant of a waste.

- (D) Volatile and semi-volatile organic compounds (if export site includes volatile and semi-volatile organic compounds as potential or actual contaminants of concern)
  - (E) Pesticides (if export site includes a known agricultural area, or pesticides as potential or actual contaminants of concern)
  - (F) Other constituents (if contaminated portion of the export site is found to contain other pollutants or contaminants)
  - j) If analytical results indicate detectable concentrations of constituents other than Title 22 metals, waste soil cannot be characterized as inert.
2. For reuse of **Tier 1 inert waste soils (full unrestricted reuse within the San Diego Region)**, the following conditions apply:
- a) Soil cannot contain any detectable concentrations of contaminants other than Title 22 metals.
  - b) For those Title 22 metals that have been identified as contaminants of concern for the export Site, samples shall be analyzed by an SW846 method using the reporting limits set forth in the Table provided in Attachment 1. From these data, the 90 percent upper confidence level (UCL) shall be determined. Prior to calculating the 90 percent UCL, one must determine whether the sample set is normally, lognormally or non-normally distributed. If lognormally distributed, one must determine the 90 percent UCL on the lognormal mean. If non-normally distributed, but sufficiently symmetrical, calculate the 90 percent UCL on the median (50<sup>th</sup> percentile), instead of the mean. See USEPA SW846 Chapter 9 and the USEPA Guidance for Data Quality Assessment for a discussion of waste characterization and statistical analysis; in particular the guidance on testing for normality, calculating a 90 percent UCL, and handling of non-detected values.<sup>9</sup>

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<sup>9</sup> See U.S. Environmental Protection Agency, Office of Solid Waste. 1986. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*; <http://www.epa.gov/epaoswer/hazwaste/test/pdfs/chap9.pdf>; and USEPA 2002, RCRA Waste Sampling Draft Technical Guidance, EPA 530-D-02-002 (Appendix F). Office of Solid Waste.

**Tier 1 Soil Screening Levels**

| <b><u>Title 22<br/>Metals</u></b> | <b><u>Inert Waste<br/>Target<sup>a</sup><br/>(mg/kg)</u></b> | <b><u>Residential<br/>CHHSL<sup>b</sup><br/>(mg/kg)</u></b> | <b><u>e-PRG<sup>c</sup><br/>(mg/kg)</u></b> | <b><u>Background<sup>d</sup><br/>Mean<br/>(mg/kg)</u></b> | <b><u>Tier 1<br/>SSL<sup>e,f</sup><br/>(mg/kg)</u></b> |
|-----------------------------------|--|---|---|---|--|
| <u>Antimony</u>                   | <u>6.0</u>   | <u>30</u>   | <u>5.0</u>                                  | <u>0.60</u>   | <u>5.0</u>   |
| <u>Arsenic</u>                    | <u>50</u>  | <u>0.07</u>   | <u>9.9</u>                                  | <u>3.5</u>  | <u>3.5</u>   |
| <u>Barium</u>                     | <u>1,000</u>   | <u>5,200</u>  | <u>283</u>                                  | <u>509</u>  | <u>509</u>   |
| <u>Beryllium</u>                  | <u>4.0</u>   | <u>150</u>  | <u>10</u>                                   | <u>1.28</u>   | <u>4.0</u>   |
| <u>Cadmium</u>                    | <u>5.0</u>   | <u>1.7</u>  | <u>4.0</u>                                  | <u>0.36</u>   | <u>1.7</u>   |
| <u>Chromium,<br/>Total</u>        | <u>50</u>  | <u>NA</u>   | <u>0.4</u>                                  | <u>122</u>  | <u>50</u>  |
| <u>Chromium,<br/>Hexavalent</u>   | <u>50</u>  | <u>17</u>   | <u>NA</u>                                   | <u>NA</u>   | <u>17</u>  |
| <u>Cobalt</u>                     | <u>NA</u>  | <u>660</u>  | <u>20</u>                                   | <u>14.9</u>   | <u>20</u>  |
| <u>Copper</u>                     | <u>1,300</u>   | <u>3,000</u>  | <u>60</u>                                   | <u>28.7</u>   | <u>60</u>  |
| <u>Lead</u>                       | <u>15</u>  | <u>150</u>  | <u>40.5</u>                                 | <u>23.9</u>   | <u>15</u>  |
| <u>Mercury</u>                    | <u>2.0</u>   | <u>18</u>   | <u>0.00051</u>                              | <u>0.26</u>   | <u>0.26</u>  |
| <u>Molybdenum</u>                 | <u>NA</u>  | <u>380</u>  | <u>2.0</u>                                  | <u>1.3</u>  | <u>2.0</u>   |
| <u>Nickel</u>                     | <u>100</u>   | <u>1,600</u>  | <u>30</u>                                   | <u>57</u>   | <u>57</u>  |
| <u>Selenium</u>                   | <u>50</u>  | <u>380</u>  | <u>0.21</u>                                 | <u>0.058</u>  | <u>0.21</u>  |
| <u>Silver</u>                     | <u>NA</u>  | <u>380</u>  | <u>2.0</u>                                  | <u>0.80</u>   | <u>2.0</u>   |
| <u>Thallium</u>                   | <u>2.0</u>   | <u>5.0</u>  | <u>1.0</u>                                  | <u>0.56</u>   | <u>1.0</u>   |
| <u>Vanadium</u>                   | <u>50</u>  | <u>530</u>  | <u>2.0</u>                                  | <u>112</u>  | <u>50</u>  |
| <u>Zinc</u>                       | <u>NA</u>  | <u>23,000</u>   | <u>8.5</u>                                  | <u>149</u>  | <u>149</u>   |

a. Calculated using Central Valley Water Board Designated Level Methodology, where the Water Quality Goal is the lower value of the Federal or State drinking water primary maximum contaminant level, the Environmental Attenuation Factor is 10, and the Leachability Factor is 100.

b. Values taken from the California Environmental Protection Agency's *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties* (CalEPA 2005).

c. Taken from Oak Ridge National Laboratory's *Preliminary Remediation Goals for Ecological Endpoints* (Efroymson, et al 1997).

d. Taken from Kearney Foundation of Soil Science Division of Agriculture and Natural Resources, University of California *Background Concentrations of Trace and Major Elements in California Soil – Special Report* (Bradford, et al 1996).

e. Tier 1 Soil Screening Level for inert waste soils that can be reused without restriction. Tier I SSLs selected based on the following steps: Step 1) Select lower value of Residential CHHSL or e-PRG; Step 2) Select lower value of Step 1 or Inert Waste Target; and, Step 3) Select higher value of Step 2 and Arithmetic Mean Background.

f. These values are not intended to provide clean up levels for soil remaining on-site. Such values should be established based on the contaminants of concern, the site use, and in conjunction with the regulatory agency providing oversight for the remediation effort.

- c) An Inert Waste Certification must be filed with the San Diego Water Board by the owner/operator of the export site within 30 days following completion of export activities. The Inert Waste Certification must include the following information:
- i) Generator name and contact information
  - ii) Export site location, owner name and contact information
  - iii) Map of the export site showing the location of the excavation, borings, stockpiles, and/or samples collected
  - iv) Approximate volume of inert waste soil exported from the site
  - v) Description of BMPs implemented to prevent discharge of waste soil off the export site during excavation and transport.
  - vi) Laboratory analytical data, including number of samples collected, EPA approved analytical methods used, the 90 percent UCL of the data for the contaminants of concern, and name of certified environmental analytical laboratory that performed the analysis.
  - vii) The export site owner, principal executive officer, or authorized representative, and a California registered professional engineer or geologist must sign and certify the Inert Waste Certification. The Inert Waste Certification must include the statement, “*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*”
3. For reuse of **Tier 2 inert waste soils (only for commercial or industrial development purposes within the San Diego Region)**, the following conditions apply:
- a) Soil cannot contain any detectable concentrations of contaminants other than Title 22 metals.
  - b) Samples shall be analyzed by an SW846 method using the reporting limits set forth in the Table provided in Attachment 1. From these data, the 90 percent UCL shall be determined. Prior to calculating the 90 percent UCL, one must determine whether the sample set is normally, lognormally or non-normally distributed. If lognormally distributed, one must determine the 90 percent UCL on the lognormal mean. If non-normally distributed, but sufficiently symmetrical, calculate the 90 percent UCL on the median (50<sup>th</sup> percentile), instead of the mean. See USEPA SW846 Chapter 9 and the USEPA Guidance for Data Quality Assessment for a discussion of waste characterization and statistical analysis; in particular the guidance on testing for normality, calculating a 90 percent UCL, and handling of non-detected values.<sup>10</sup>

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<sup>10</sup> See U.S. Environmental Protection Agency, Office of Solid Waste. 1986. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*; <http://www.epa.gov/epaoswer/hazwaste/test/pdfs/chap9.pdf>; and USEPA 2002, RCRA Waste Sampling Draft Technical Guidance, EPA 530-D-02-002 (Appendix F). Office of Solid Waste.

**Tier 2 Soil Screening Levels**

| <u>Pollutant</u>            | <u>Inert Waste Target<sup>a</sup><br/>(mg/kg)</u> | <u>Industrial CHHSL<sup>b</sup><br/>(mg/kg)</u> | <u>Background<sup>d</sup></u> |                          | <u>TTL<sup>e</sup><br/>(mg/kg)</u> | <u>Tier 2 SSL<sup>f,g</sup><br/>(mg/kg)</u> |
|-----------------------------|---|---|-------------------------------|--------------------------|------------------------------------|---|
|                             |   |   | <u>Max<br/>(mg/kg)</u>        | <u>½ Max<br/>(mg/kg)</u> |                                    |   |
| <u>Antimony</u>             | <u>6.0</u>  | <u>380</u>                                      | <u>1.95</u>                   | <u>0.98</u>              | <u>500</u>                         | <u>6.0</u>                                  |
| <u>Arsenic</u>              | <u>50</u>   | <u>0.24</u>                                     | <u>11</u>                     | <u>5.5</u>               | <u>500</u>                         | <u>5.5</u>                                  |
| <u>Barium</u>               | <u>1,000</u>                                      | <u>63,000</u>                                   | <u>1,400</u>                  | <u>700</u>               | <u>10,000</u>                      | <u>1,000</u>                                |
| <u>Beryllium</u>            | <u>4.0</u>  | <u>1,700</u>                                    | <u>2.7</u>                    | <u>1.4</u>               | <u>75</u>                          | <u>4</u>                                    |
| <u>Cadmium</u>              | <u>5.0</u>  | <u>7.5</u>                                      | <u>1.70</u>                   | <u>0.85</u>              | <u>100</u>                         | <u>5</u>                                    |
| <u>Chromium, Total</u>      | <u>50</u>   | <u>100,000</u>                                  | <u>1,579</u>                  | <u>790</u>               | <u>2,500</u>                       | <u>790</u>                                  |
| <u>Chromium, Hexavalent</u> | <u>50</u>   | <u>37</u>                                       | <u>NA</u>                     | <u>NA</u>                | <u>500</u>                         | <u>37</u>                                   |
| <u>Cobalt</u>               | <u>NA</u>   | <u>3,200</u>                                    | <u>46.9</u>                   | <u>23.5</u>              | <u>8,000</u>                       | <u>3,200</u>                                |
| <u>Copper</u>               | <u>1,300</u>                                      | <u>38,000</u>                                   | <u>96.4</u>                   | <u>48.2</u>              | <u>2,500</u>                       | <u>1,300</u>                                |
| <u>Lead</u>                 | <u>15</u>   | <u>3,500</u>                                    | <u>97.1</u>                   | <u>48.6</u>              | <u>1,000</u>                       | <u>49</u>                                   |
| <u>Mercury</u>              | <u>2.0</u>  | <u>180</u>                                      | <u>0.90</u>                   | <u>0.45</u>              | <u>20</u>                          | <u>2</u>                                    |
| <u>Molybdenum</u>           | <u>NA</u>   | <u>4,800</u>                                    | <u>9.6</u>                    | <u>4.8</u>               | <u>3,500</u>                       | <u>3,500*</u>                               |
| <u>Nickel</u>               | <u>100</u>  | <u>16,000</u>                                   | <u>509</u>                    | <u>255</u>               | <u>2,000</u>                       | <u>255</u>                                  |
| <u>Selenium</u>             | <u>50</u>   | <u>4,800</u>                                    | <u>0.43</u>                   | <u>0.22</u>              | <u>100</u>                         | <u>50</u>                                   |
| <u>Silver</u>               | <u>NA</u>   | <u>4,800</u>                                    | <u>8.30</u>                   | <u>4.2</u>               | <u>500</u>                         | <u>500*</u>                                 |
| <u>Thallium</u>             | <u>2.0</u>  | <u>63</u>                                       | <u>1.10</u>                   | <u>0.55</u>              | <u>700</u>                         | <u>2</u>                                    |
| <u>Vanadium</u>             | <u>50</u>   | <u>6,700</u>                                    | <u>288</u>                    | <u>144</u>               | <u>2,400</u>                       | <u>144</u>                                  |
| <u>Zinc</u>                 | <u>NA</u>   | <u>100,000</u>                                  | <u>236</u>                    | <u>118</u>               | <u>5,000</u>                       | <u>5,000*</u>                               |

\* None of the analytical results from any samples collected to characterize the waste soil can exceed the Tier 2 Soil Screening Level for this pollutant.

a. Calculated using Central Valley Water Board Designated Level Methodology, where the Water Quality Goal is the lower value of the Federal or State drinking water primary maximum contaminant level, the Environmental Attenuation Factor is 10, and the Leachability Factor is 100.

b. Values taken from the California Environmental Protection Agency's *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties* (CalEPA 2005).

c. Taken from Oak Ridge National Laboratory's *Preliminary Remediation Goals for Ecological Endpoints* (Efroymson, et al 1997).

d. Taken from Kearney Foundation of Soil Science Division of Agriculture and Natural Resources, University of California *Background Concentrations of Trace and Major Elements in California Soil – Special Report* (Bradford, et al 1996).

e. Total Threshold Limit Concentration. Concentrations above the TTL would be classified as hazardous waste.

f. Tier 2 Soil Screening Level for inert waste soils that can be reused only for commercial or industrial land use designation. Tier II SSLs selected based on the following steps: Step 1) Select lower value of Industrial CHHSL or Inert Waste Target; Step 2) Select higher value of Step 1 or ½ Maximum Background; and, Step 3) Select lower value of Step 2 and Total Threshold Limit Concentration.

g. These values are not intended to provide clean up levels for soil remaining on-site. Such values should be established based on the contaminants of concern, the site use, and in conjunction with the regulatory agency providing oversight for the remediation effort.

- c) An Inert Waste Certification must be filed with the San Diego Water Board by the owner/operator of the export site within 30 days following export and placement of the soil. The Inert Waste Certification must include the following information:
- i) Generator name and contact information
  - ii) Export site location, owner name and contact information
  - iii) Approximate volume of inert waste soil exported from the site
  - iv) Description of BMPs implemented to prevent discharge of waste soil off the export site during excavation and transport.
  - v) Laboratory analytical data, including number of samples collected, EPA approved analytical methods used, the 90 percent UCL of the data for the contaminants of concern, and name of certified environmental analytical laboratory performing analysis
  - vi) Import site owner name and contact information, with a map of the site location showing nearby surface water bodies, approximate depth to groundwater, and BMPs that will be implemented to eliminate the potential for discharge of inert waste soils to surface waters.
  - vii) The import site owner, principal executive officer, or authorized representative must provide a signature acknowledging the receipt or planned receipt of the inert waste soil.
  - viii) The export site owner, principal executive officer, or authorized representative, and a California registered professional engineer or geologist must sign and certify the Inert Waste Certification. The Inert Waste Certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*"
- d) Tier 2 inert waste soil reused at commercial or industrial development sites must comply with the following conditions:
- i) Tier 2 inert waste soil may only be reused on commercial or industrial sites. It may not be reused at residential, school, or park sites.
  - ii) Tier 2 inert waste soil must be placed at least 5 feet above the highest historically known or anticipated level of groundwater. The soil that separates the inert waste soil from groundwater shall have a significant clay content (greater than 5 percent clay material) or an in-situ permeability of less than  $10^{-5}$  cm/sec.
  - iii) Tier 2 inert waste shall be placed at least 100 feet from the nearest surface water body.
  - iv) Tier 2 inert waste shall be protected against 100-year peak stream flows as defined by the County flood control agency.
  - v) Tier 2 inert waste shall be covered by either: 1) engineered materials (e.g. used as road base, fill beneath buildings, bridge abutments), or 2) not less than 2 feet of noncontaminated, clean fill. The cover shall have a permeability of no more than  $10^{-5}$  cm/sec. Placement of a cover on the inert waste soils shall be completed with 30 days of discharging the final load of inert waste soils at the import site.

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**CONDITONAL WAIVER NO. 9 – DISCHARGES OF SLURRIES TO LAND**

Conditional Waiver No. 9 is for discharges of slurries to land, which may be a source of pollutants that can adversely affect the quality of waters of the state. A slurry typically consists of water and some material to form a liquid mixture.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 9:

- Discharges of drilling muds to land
- Discharges of concrete grinding residues to land

In order to be eligible for Conditional Waiver No. 9, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges of slurries to land include the following:

9.I.A. General Waiver Conditions for Slurries Discharged to Land

9.II.A. Specific Waiver Conditions for Discharges of Drilling Mud to Land

Discharges of slurries to land that comply with the general and specific waiver conditions in Conditional Waiver No. 9 are not expected to pose a threat to the quality of waters of the state.

**9.I.A. General Waiver Conditions for Slurries Discharged to Land**

1. Prevent the direct or indirect discharge of slurries to any surface waters of the state (including ephemeral streams and vernal pools).
2. Slurries must be contained to eliminate the potential for runoff from the site.
3. If slurries are discharged to land for storage, the storage area or sump must be designed to be fully contained and ensure no overflow during discharge with at least 2 feet of freeboard.
4. The floor of the storage area or sump must be at least 5 feet above the highest known historical or anticipated groundwater level.
5. The walls of the storage area or sump must be at least 100 feet away from any surface water body or municipal water well.
6. Slurries cannot contain any toxic or hazardous constituents.
7. Slurries discharged to land must not adversely affect the quality or beneficial uses of underlying groundwater.
8. Slurries must be removed and disposed of at an appropriate disposal facility prior to restoring the storage area or sump to pre-discharge conditions.
9. The storage area or sump must be filled in and restored to pre-discharge conditions.
10. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

**9.II.A. Specific Waiver Conditions for Discharge of Drilling Muds**

1. Drilling mud cannot be from borings advanced for a soil or groundwater contamination investigation.

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## **CONDITIONAL WAIVER NO. 10 – DISCHARGES OF EMERGENCY/DISASTER RELATED WASTES**

Conditional Waiver No. 10 is for discharges of wastes resulting from an emergency or disaster, which may be a source of pollutants that can adversely affect the quality of waters of the state.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 10:

- Incidental discharges of oil and oily water within a response area during an oil spill response in marine waters
- Discharges of disaster related wastes to temporary waste piles and surface impoundments
- Discharges of mass mortality wastes temporary waste piles and emergency landfills
- Other discharges of emergency/disaster related wastes

In order to be eligible for Conditional Waiver No. 10, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to emergency/disaster related waste discharges include the following:

- 10.I.A. General Waiver Conditions for Discharges of Emergency/Disaster Related Wastes
- 10.II.A. Specific Waiver Conditions for Incidental Discharges During an Oil Spill Response
- 10.II.B. Specific Waiver Conditions for Disaster Related and Mass Mortality Wastes Disposed at Regulated Waste Disposal Facilities
- 10.II.C. Specific Waiver Conditions for Disaster Related and Mass Mortality Wastes Discharged to Temporary Waste Piles Located at Regulated Waste Disposal Facilities
- 10.II.D. Specific Waiver Conditions for Disaster Related Wastes Discharged to Temporary Waste Piles NOT Located at Regulated Waste Disposal Facilities
- 10.II.E. Specific Waiver Conditions for Disaster Related Wastes Discharged to Temporary Surface Impoundments NOT Located at Regulated Waste Disposal Facilities
- 10.II.F. Specific Waiver Conditions for Mass Mortality Wastes Discharged to Emergency Landfills NOT Located at Regulated Waste Disposal Facilities

Discharges of emergency/disaster related wastes that comply with the general and specific waiver conditions in Conditional Waiver No. 10 should minimize the potential impact and should not pose a significant threat to the quality of waters of the state.

### **10.I.A. General Waiver Conditions for Discharges of Emergency/Disaster Related Wastes**

1. This conditional waiver does not become active and available until one of the following occurs:
  - a) The Governor of California issues a proclamation, pursuant to Government Code sections 8625 and 8558(b), identifying a portion of the San Diego Region as being in a state of emergency, and applies only to disaster related waste streams from disaster-impacted areas; or

- b) An oil spill incident occurs in the marine waters of the San Diego Region requiring a response authorized by the Administrator of the Office of Spill Prevention and Response; or
  - c) A discharge occurs resulting from emergency activities that are waived of the requirements of Water Code sections 13260(a) and (c), 13263(a), and 13264(a), which are described in Water Code section 13269(c)(1) and (2).
2. This conditional waiver is only in effect temporarily and shall expire under the following conditions:
- a) The state of emergency declared by the Governor expires, or
  - b) The San Diego Water Board takes action to terminate enrollment of individual or all dischargers/Units temporarily granted a waiver, or
  - c) Six (6) months has elapsed since the Governor issued a declaration of the State of emergency for any portion of the San Diego Region, or the oil spill incident occurred, or emergency activities began, unless otherwise directed by the San Diego Water Board.
3. Emergency/disaster related waste management and cleanup activities must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of the waters of the state.
4. For all temporary waste piles and surface impoundments used to manage emergency/disaster related waste, the following conditions apply:
- a) Prevent the direct or indirect discharge of emergency/disaster related wastes to any surface waters of the state (including ephemeral streams and vernal pools).
  - b) Emergency/disaster related waste management operations shall not be performed in a manner that creates, or contributes to a condition of pollution or nuisance.
  - c) Emergency/disaster related waste management operations shall not be performed in a manner that creates, or contributes to conditions which violate the waste discharge prohibitions promulgated in the Basin Plan.
  - d) Emergency/disaster related wastes shall not be managed in a manner that causes corrosion, decay, or otherwise reduces or impairs the integrity of containment structures at any waste management unit.<sup>11</sup>
  - e) Emergency/disaster related wastes shall not be managed in a manner that mixes or commingles other wastes that can produce a violent reaction (including heat, pressure, fire or explosion), that can produce toxic byproducts, or that can produce any reaction products requiring a higher level of containment, or results in the mixture being classified as a restricted waste.<sup>12</sup>
  - f) Liquid hazardous wastes or "restricted hazardous wastes"<sup>13</sup> cannot be discharged to municipal solid waste (MSW) landfills, temporary waste piles, or temporary surface impoundments.
  - g) Temporary waste piles must be covered to adequately prevent rainwater infiltration and runoff, and control fugitive dust, vectors, odors, blowing litter and scavenging. The cover shall not consist of or contain material classified as a designated waste.<sup>14</sup>

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<sup>11</sup> Pursuant to California Code of Regulations Title 27 section 20200(b)(1)

<sup>12</sup> Pursuant to California Code of Regulations Title 27 section 20200(b)(2)

<sup>13</sup> Defined in California Health and Safety Code section 25122.7

<sup>14</sup> Defined in California Code of Regulations Title 27 section 20210

- h) Inert wastes<sup>15</sup> that are suitable for reuse or recycling do not require permanent disposal at a classified waste management or disposal facility (i.e., permitted landfill).
- i) Waste streams must only originate from disaster-impacted areas of the San Diego Region. These waste streams shall be discharged for treatment and permanent disposal **only** into:
  - i) Waste management or treatment units (e.g., liquid wastes into wastewater treatment plants) as allowed by waste discharge requirements (WDRs) issued by the San Diego Water Board, or
  - ii) Solid waste management units or disposal facilities (e.g., solid wastes into Class III MSW landfills underlain with engineered composite liners and leachate collection systems and that satisfy the requirements of State Water Board Resolution No. 93-62); or
  - iii) Emergency landfills established in accordance with the conditions of this waiver; and
  - iv) As allowed by valid WDRs issued by the San Diego Water Board for other categories of waste management units.

**10.II.A. Specific Waiver Conditions for Incidental Discharges During an Oil Spill Response**

- 1. Incidental discharges<sup>16</sup> are confined to the response area which is defined by the daily work plan approved under the Incident Command System or Unified Command Structure by the Administrator, Federal On-Scene Coordinator, or State On-Scene Coordinator.
- 2. Oil spill response must be in marine waters.<sup>17</sup>

**10.II.B. Specific Waiver Conditions for Disaster Related and Mass Mortality Wastes Disposed at Regulated Waste Disposal Facilities**

- 1. Waste (not otherwise suitable for recycling or reuse) derived from cleanup of emergency/disaster-impacted areas in the San Diego Region and managed under provisions of this waiver shall only be discharged *for permanent disposal into units that are underlain with an engineered composite liner system and a leachate collection meeting the requirements of State Water Board Resolution No. 93-62.*
- 2. Wastes derived from cleanup of disaster-impacted areas in the San Diego Region and discharged into regulated waste disposal facilities must be isolated, to the extent practicable, from areas of the facility that are not lined.
- 3. Food wastes, animal carcasses, and other putrescible wastes derived from cleanup of disaster-impacted areas in the San Diego Region shall be discharged for disposal in compliance with conditions of this waiver and covered expeditiously.
- 4. Inert wastes contained in mixed emergency wastes derived from cleanup of disaster-impacted areas in the San Diego Region, shall be separated and recycled when appropriate and practicable.

<sup>15</sup> Defined in California Code of Regulations Title 27 section 20230

<sup>16</sup> "Incidental discharge" is defined as "the release of oil and/or oily water within the response area in or proximate to the area in which the oil recovery activities are taking place during and attendant to oil spill response activities. Incidental discharges include, but are not limited to, the decanting of oily water; in order to conserve oil storage capacity, and the wash down of vessels, facilities, and equipment used in the response."

<sup>17</sup> "Marine waters" defined in Government Code section 8670.3(i) as "those waters subject to tidal influence"

5. The discharger is responsible for accurately classifying disaster related waste streams in accordance with the applicable regulatory requirements.<sup>18</sup>
6. The regulated waste disposal facility owner/operator is responsible for properly identifying disaster related waste streams<sup>19</sup> and identifying wastes that may be suitable for use as alternative daily cover (ADC). Solid wastes that may be used as ADC at a regulated disposal facility are as follows:
  - a) Solid wastes that are classified as inert wastes.
  - b) Solid wastes that meet the criteria for ADC as prescribed in California Code of Regulations Title 27 sections 20690 to 20705, and.
  - c) Other solid wastes identified by the Local Enforcement Agency (LEA) as being suitable for use as ADC; so long as the waste could be accepted at a Class III MSW landfill without special permission from the San Diego Water Board.
7. Disposal of large numbers of animal carcasses, and other high moisture waste streams from mass mortality (e.g., natural disaster, agricultural disease, etc.), may cause wastes to exceed moisture holding capacity at regulated MSW landfills. To limit the impacts from such a large an additional moisture content associated with a mass mortality waste load, the owner/operator responsible for the regulated waste disposal facility should implement the following procedures:
  - a) Discharge high-moisture wastes (animal carcasses, animal related wastes, etc.) only in areas of the composite lined unit with a considerable thickness of other waste.
  - b) Owner/operator must limit the thickness of the high-moisture waste stream (e.g., animal carcasses, animal related wastes, etc.) to no more than 2 feet.
  - c) Owner/operator must cover each layer of high-moisture wastes (e.g., animal carcasses, animal related wastes, etc.) with an even thicker layer of absorbent wastes or soil.
  - d) For disaster related mass mortality wastes streams that are in a liquid form (e.g. raw eggs, etc.) reduce the moisture content prior to discharge by mixing with an absorbent material (e.g., saw dust, mulch, soil, etc.).
8. Within 60 days after the expiration of this waiver (see 10.I.A) the owner/operator of the a regulated waste disposal facility that accepted waste from disaster-impacted areas in the San Diego Region must submit an amendment to their Report of Waste Discharge (RoWD) (Joint Technical Document) describing the material change to their discharge, pertaining to the temporary acceptance, management, and disposal of waste derived from cleanup of disaster-impacted areas of the San Diego Region.

**10.II.C. Specific Waiver Conditions for Disaster Related and Mass Mortality Wastes Discharged to Temporary Waste Piles Located at Regulated Waste Disposal Facilities**

1. Owners/operators of regulated waste management or disposal facilities proposing to accept discharges of waste from disaster-impacted areas in the San Diego Region to a temporary waste staging area located at a regulated facility must submit a Notice of Intent to the San Diego Water Board within 30 days of the initial discharge of any disaster related wastes. The Notice of Intent must contain the name and contact information of the owner/operator of the regulated waste management or

<sup>18</sup> Requirements are provided in California Code of Regulations Title 27, Title 23 Chapter 15, and/or Title 22 Division 4.5.

<sup>19</sup> Pursuant to California Code of Regulations Title 27 section 20200(c)

disposal facility property, facility address and contact information, description of temporary waste management unit, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

2. Owners/operators of regulated waste management or disposal facilities must prevent surface runoff/runon from contacting wastes derived from cleanup of disaster-impacted areas in the San Diego Region and shall prevent erosion and transport of soils containing disaster related wastes or waste constituents by surface runoff from all temporary waste piles. The facility owner/operator must implement management measures (MMs) and/or best management practices (BMPs) for storm water conveyance and control.
3. All wastes derived from disaster-impacted areas in the San Diego Region must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from, and at an elevation that is higher than, any surface water of the state.
4. All waste derived from disaster-impacted areas in the San Diego Region must be protected from flooding and inundation, in compliance with the current WDRs for the affected unit, or units, at the regulated facility.
5. Owners/operators of regulated waste management or disposal facilities must manage temporary waste piles for disaster related mass mortality wastes as follows:
  - a) Temporary waste piles of mass mortality wastes can only be located in areas underlain by a composite liner system (or approved engineering alternative) and a significant thickness of other types of solid wastes.
  - b) Owner/operator must implement a plan to prevent wild animals (e.g., birds, mammals, reptiles, etc.) from coming into contact with mass mortality wastes (e.g., provide and maintain adequate cover for temporary waste piles).
  - c) Owner/operator must ensure that all temporary waste piles containing mass mortality wastes are discharged into landfill prior to the end of the working day, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality and human health for a given temporary waste pile.
  - d) Owner/operator must ensure that all mass mortality wastes are covered with soil or other waste immediately after it is discharged into the landfill.
  - e) Owner/operator must ensure that any storm water runoff that comes into contact with the disaster related wastes or containing waste constituents is managed as leachate.
6. Disaster related and mass mortality wastes discharged to temporary waste piles at regulated waste management or disposal facilities temporarily granted a waiver, together with any materials used to contain the temporary waste piles, shall be removed from the site. The site shall be restored to its original state no later than the 60 days after expiration of this waiver (see 10.I.A), or as required by the San Diego Water Board. Alternatively, the facility owner/operator must file an amended RoWD (Joint Technical Document) and obtain amended WDRs from the San Diego



Water Board for any waste piles that will continue to exist past the expiration date of this waiver.

7. Owners/operators of regulated waste management or disposal facilities must submit a Notice of Termination to the San Diego Water Board within 10 working days of completing removal of all disaster related wastes and restoring the site to its original condition. The Notice of Termination must contain the name and contact information of the owner/operator of the regulated facility property, facility address and contact information, description of waste that was temporarily stored/staged in the temporary waste management unit, the final waste disposal location, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

**10.II.D. Specific Waiver Conditions for Disaster Related Wastes Discharged to Temporary Waste Piles NOT Located at Regulated Waste Disposal Facilities**

1. Any agency, jurisdiction or person proposing to establish a temporary waste pile not located at a regulated facility must submit a Notice of Intent to the San Diego Water Board within 30 days of the initial discharge of any disaster related wastes. The Notice of Intent must contain the name and contact information of the owner/operator the property where the temporary waste pile facility is located, facility address and contact information, description of temporary waste management unit, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
2. Owners/operators of temporary waste piles not on regulated facilities must ensure that they are sited, designed, constructed, operated, and maintained to ensure compliance the following minimum prescriptive and performance standards:
  - a) The bottom of a temporary waste pile must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from, and at an elevation that is higher than, any surface water of the state.
  - b) Temporary waste piles must be protected from inundation or washout due of floods with a 100-year return period.
  - c) Temporary waste piles cannot be located on a known Holocene fault.
  - d) Temporary waste piles cannot be located in areas of potential rapid geologic change (e.g., landslides, debris flows, flashflood areas, etc.).
  - e) Temporary waste piles must be underlain by a temporary impermeable barrier (e.g., heavy gauge plastic) or located in an area covered by a relatively impermeable surface (e.g., asphalt, concrete, etc.). The liner must be installed prior to establishing a temporary waste pile to protect all natural geological materials from contact with the waste and from contact with leachate.



- f) Temporary waste piles must be covered daily with either a heavy gage plastic or material that meets the classification criteria for inert wastes. A material that would be classified as a designated waste cannot be utilized for daily cover at a temporary waste staging area. Cover on the temporary waste piles must be designed, installed and maintained to prevent rainwater infiltration and runoff, and control of fugitive dust, vectors, odors, blowing litter and scavenging.
- g) Temporary waste management operations that include wastes with a liquid content exceeding its moisture-holding capacity and/or containing free liquids, shall comply with requirements for temporary surface impoundments (see 10.II.E).
- h) Temporary waste piles must be designed, constructed and operated to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout. Surface drainage from outside of the temporary waste pile shall be diverted from the location of the temporary waste pile through implementation of MMs/BMPs for storm water control and conveyance.
- 3. Owners/operators of temporary waste piles not on regulated facilities must submit written notification to the San Diego Board at least 30 days prior to initiating the discharge of return water or ponded water contained within the temporary waste pile if the discharge is to a location other than a sanitary sewer system. Based on the San Diego Water Board determination, the discharger may receive: 1) WDRs; 2) a waiver of WDRs, or 3) written determination that the disposal of the return water or ponded water is not subject to regulation by the San Diego Water Board.
- 4. Owners/operators of temporary waste piles not on regulated facilities must post at least one clearly visible sign (in English) listing the following minimum information: a) project name, b) brief project description, and c) operator name and phone number. The discharger must post additional signs as necessary (in languages other than English) to more effectively communicate the minimum contact information (listed above) to the local community. The sign(s) shall be maintained as required to keep them legible and shall remain in place while temporary waste piles remain on site.
- 5. Solid wastes discharged to temporary waste piles not at regulated waste management or disposal facilities temporarily granted a waiver, together with any materials used to contain the temporary waste piles, shall be removed from the site. The site shall be restored to its original state no later than the 60 days after expiration of this waiver (see 10.I.A), or as required by the San Diego Water Board.
- 6. Owners/operators of temporary waste piles not on regulated facilities must submit a Notice of Termination to the San Diego Water Board within 10 working days of completing removal of all disaster related wastes and restoring the site to its original condition. The Notice of Termination must contain the name and contact information of the owner/operator the property where the temporary waste pile facility was located, facility address and contact information, description of waste that was temporarily stored/staged in the temporary waste management unit, the final waste disposal location, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there*

are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

**10.II.E. Specific Waiver Conditions for Disaster Related Wastes Discharged to Temporary Surface Impoundments NOT Located at Regulated Waste Disposal Facilities**

1. Any agency, jurisdiction or person proposing to establish a temporary surface impoundment not located at a regulated facility must submit a Notice of Intent to the San Diego Water Board within 30 days of the initial discharge of any disaster related wastes. The Notice of Intent must contain the name and contact information of the owner/operator the property where the temporary surface impoundment facility is located, facility address and contact information, description of temporary waste management unit, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, “I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”
2. Owners/operators of temporary surface impoundments not on regulated facilities must ensure that they are sited, designed, constructed, operated, and maintained to ensure compliance the following minimum prescriptive and performance standards:
  - a) The bottom of a temporary surface impoundment must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from, and at an elevation that is higher than, any surface water of the state.
  - b) Temporary surface impoundments must be protected from inundation or washout due of floods with a 100-year return period.
  - c) Temporary surface impoundments cannot be located on a known Holocene fault.
  - d) Temporary surface impoundments cannot be located in areas of potential rapid geologic change (e.g., landslides, debris flows, flashflood areas, etc.).
  - e) Temporary surface impoundments must be underlain by a temporary impermeable barrier (e.g., heavy gauge plastic) or a relatively impermeable surface (e.g., asphalt, concrete, etc.). The liner must be installed prior to establishing a temporary surface impoundment to protect all natural geological materials from contact with the waste.
  - f) Berms and containment structures of temporary surface impoundments must be composed of inert materials that will not cause adverse reactions (e.g., corrosion, decay, or otherwise reduce or impair the integrity of the containment structure) when placed in contact with the liquid wastes stored within the temporary surface impoundment.
  - g) Temporary surface impoundments must be designed, operated and maintained to ensure that liquid wastes are at least 2 feet below the top of the impoundment (measured vertically from the surface of the liquid up to the point on the surrounding lined berm or dike having the lowest elevation), and must be designed and constructed to prevent overtopping as a results of wind conditions likely to accompany precipitation conditions.

- h) Direct pipeline discharges of liquid can occur only into temporary surface impoundments with automatic or manually operated fail-safe systems to prevent overfilling.
- i) Temporary surface impoundments must be designed and constructed to prevent scouring of containment structures at points of liquid discharge into the impoundments.
- j) Temporary surface impoundments must be designed, constructed and operated to limit, to the greatest extent possible, inundation, erosion, slope failure, and washout. Surface drainage from outside of the temporary surface impoundments shall be diverted from the location of the temporary waste pile through implementation of MMs/BMPs for storm water control and conveyance.
- 3. Owners/operators of temporary surface impoundments not on regulated facilities must submit written notification to the San Diego Board at least 30 days prior to initiating the discharge of return water or ponded water contained within the temporary waste pile if the discharge is to a location other than a sanitary sewer system. Based on the San Diego Water Board determination, the discharger may receive: 1) WDRs; 2) a waiver of WDRs, or 3) written determination that the disposal of the return water or ponded water is not subject to regulation by the San Diego Water Board.
- 4. Owners/operators of temporary surface impoundments not on regulated facilities must ensure that only disaster related waste streams are discharged into temporary surface impoundments.
- 5. All visible portions of synthetic liner systems in temporary surface impoundments must be inspected weekly, or daily as necessary, until all free liquid is removed from the surface impoundment as part of closure.<sup>20</sup> If, during the active life of the temporary surface impoundment, the wastes are removed and the bottom of the impoundment is cleaned down to the liner, an inspection shall be made of the bottom of the liner prior to refilling the impoundment.
- 6. Owners/operators of temporary surface impoundments not on regulated facilities must post at least one clearly visible sign (in English) listing the following minimum information: a) project name, b) brief project description, and c) operator name and phone number. The facility owner/operator must post additional signs as necessary (in languages other than English) to more effectively communicate the minimum contact information (listed above) to the local community. The sign(s) shall be maintained as required to keep them legible and shall remain in place while temporary surface impoundments remain on site.
- 7. Solid wastes discharged to temporary surface impoundments not at regulated waste management or disposal facilities, together with any materials used to contain the temporary surface impoundments, shall be removed from the site. The site shall be restored to its original state no later than the 60 days after expiration of this waiver (see 10.I.A), or as required by the San Diego Water Board.
- 8. Owners/operators of temporary surface impoundments not on regulated facilities must submit a Notice of Termination to the San Diego Water Board within 10 working days of completing removal of all disaster related wastes and restoring the site to its original condition. The Notice of Termination must contain the name and contact information of the owner/operator the property where the temporary

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<sup>20</sup> Pursuant to California Code of Regulations Title 27 section 21400(a)

surface impoundment facility was located, facility address and contact information, description of waste that was temporarily stored/staged in the temporary waste management unit, the final waste disposal location, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

**10.II.F. Specific Waiver Conditions for Mass Mortality Wastes Discharged to Emergency Landfills NOT Located at Regulated Waste Disposal Facilities**

1. Any agency, jurisdiction or person proposing to establish an emergency landfill not located at a regulated facility must submit a Notice of Intent to the San Diego Water Board within 30 days of the initial discharge of any disaster related wastes. The Notice of Intent must contain the name and contact information of the owner/operator the property where the emergency landfill facility is located, facility address and contact information, description of emergency waste management unit, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
2. Owners/operators of emergency landfills not on regulated facilities must ensure that they are sited, designed, constructed, operated, and maintained to ensure compliance the following minimum prescriptive and performance standards:
  - a) The bottom of an emergency landfill must be placed at least 10 feet above the highest historically known or anticipated level of groundwater, and more than 500 feet from any surface water of the state.
  - b) Emergency landfills must be protected from inundation or washout due of floods with a 100-year return period.
  - c) Emergency landfills cannot be located on a known Holocene fault.
  - d) Emergency landfills cannot be located in areas of potential rapid geologic change (e.g., landslides, debris flows, flashflood areas, etc.).
  - e) Emergency landfills cannot be located in areas underlain by fractured bedrock aquifer or highly permeable soils (e.g., gravels, sands, and loamy sands) or in facilities that are characterized by such deposits (e.g., gravel quarry).
  - f) For disaster related mass mortality wastes streams that are in a liquid form (e.g. raw eggs, etc.) reduce the moisture content prior to discharge by mixing with an absorbent material (e.g., saw dust, mulch, soil, etc.).
  - g) The thickness of each layer of mass mortality wastes must be limited to less than 2 feet.
  - h) Lime (or another liquid abatement material) must be added to each layer to help reduce the generation of liquid by the mass mortality wastes.

- i) Each layer of lime-covered mass mortality wastes must be covered by at least 3 feet of soil before adding another layer of mass mortality wastes.
  - j) Mass mortality wastes must be discharged for disposal in compliance with the conditions of this waiver and covered at the end of each working day
  - k) The final layer of disaster related mass mortality wastes discharged into the emergency landfill must be overlain by a final layer of not less than 3 feet of soil; or alternatively the unit may be covered by a relatively impermeable engineered surface (e.g., asphalt, concrete, etc.). The final soil layer shall be placed in a mound configuration so that the final soil layer: 1) Overlaps the mass mortality wastes by several feet on each edge of the emergency landfill; 2) is at least 3 feet thick over all portions of the mass mortality wastes; and 3) is sloped to provide good drainage that does not impair the integrity of the emergency landfill.
  - l) Owner/operator should also evaluate, implement, and document other effective waste isolation (and waste moisture reducing methods) in conjunction with the procedures identified above
3. The emergency landfill must be designed, constructed and operated to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout. The owner/operator must protect the integrity of the final cover from adverse impacts by erosion by installing and maintaining MMs/BMPs, including:
- a) Installation of runoff control features on the upgradient side of the emergency landfill to divert offsite storm water from the emergency landfill.
  - b) Installation of an effective runoff collection and conveyance ditch.
  - c) Grading and maintenance of the final cover to eliminate ponding of water over the emergency landfill.
  - d) Installation and maintenance of erosion control measures on the cover of the emergency landfill (e.g., install straw mulch and/or a vegetative cover).
  - e) Installation of a deer fence around the perimeter of the emergency landfill to discourage access by digging of carnivores.
4. Owners/operators of emergency landfills not on regulated facilities must post at least one clearly visible sign (in English) listing the following minimum information: a) clearly identify the area as an emergency landfill for animal and agricultural wastes, b) a warning against trespass, c) a description of the reason for the emergency landfill (e.g., Exotic Newcastle, Avian Flu, etc.), the type(s) of waste buried at the site (e.g., types of carcasses, egg wastes, manure, etc.), and d) the name and telephone number of the current property owner. The facility owner/operator must post additional signs as necessary (in languages other than English) to more effectively communicate the minimum contact information (listed above) to the local community. The sign(s) shall be maintained as required to keep them legible and shall remain in place while the emergency landfill remains on site.
5. Owners/operators of emergency landfills not on regulated facilities must submit Notice of Termination to the San Diego Water Board within 10 working days of completing removal of all disaster related wastes and restoring the site to its original condition. The Notice of Termination must contain the name and contact information of the owner/operator the property where the temporary waste pile facility was located, facility address and contact information, description of waste that was temporarily stored/staged in the temporary waste management unit, the final waste disposal location, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "I certify

under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

6. Owners/operators of emergency landfills not on regulated facilities must submit a RoWD to the San Diego Water Board and apply for WDRs (using Form 200). The RoWD and application for WDRs must be provided to the San Diego Water Board within 6 months of creating the emergency landfill for disposal of disaster related mass mortality wastes. At a minimum, the RoWD shall include the following information:
- a) A short description of the emergency conditions that made the emergency landfill necessary.
  - b) The identity, physical address, mailing address and telephone number of the current land owner.
  - c) Photographs taken to document the location of the emergency landfill, practices used for placement of wastes and soil layers, and the appearance of the emergency landfill after installation of the final cover.
  - d) A map showing the location and perimeter of the emergency landfill, its location relative to local topographical, geographical, biological, and cultural features (e.g. roads, streams, etc.), and provide Geographical Information System (GIS) data as available.
  - e) A simple cross section of the emergency landfill and a description of the construction (depth, thickness of layers and final cover).
  - f) An estimate of the amount of wastes (e.g., in pounds or tons) discharged into the emergency landfill.
  - g) A description of measures taken to ensure that wastes and waste constituents do not migrate outside the emergency landfill.
  - h) Any other site-specific or discharger related information requested by the San Diego Water Board.



**CONDITIONAL WAIVER NO. 11 – AERIALLY DISCHARGED WASTES OVER LAND**

Conditional Waiver No. 11 is for discharges of wastes that have been discharged aerially over land, which may be a source of pollutants that can adversely affect the quality of waters of the state.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 11:

- Discharges of wastes related to fireworks displays over land
- Other wastes discharged aerially over land that may adversely affect the quality of the waters of the state, but determined to be “low threat” by the San Diego Water Board

In order to be eligible for Conditional Waiver No. 11, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to wastes discharged aerially over land include the following:

11.I.A. General Waiver Conditions for Aerially Discharged Wastes Over Land

11.II.A. Specific Waiver Conditions for Discharges of Waste Related to Fireworks Displays Over Land

Wastes discharged aerially over land that comply with the general and specific waiver conditions in Conditional Waiver No. 11 are not expected to pose a threat to the quality of waters of the state.

**11.I.A. General Waiver Conditions for Aerially Discharged Wastes Over Land**

1. Aerially discharged wastes cannot be discharged directly over and/or into surface waters of the state (including ephemeral streams and vernal pools).
2. Aerially discharged wastes must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
3. Aerially discharged wastes must not impact the quality of groundwater in any water wells or surface water in any drinking water reservoirs.
4. Dischargers must comply with any local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.
5. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

**11.II.A. Specific Waiver Conditions for Discharges of Waste Related to Fireworks Displays Over Land**

1. No more than one fireworks display may be conducted from a launch site or within 1.0 mile of another launch site within a 48-hour period.<sup>21</sup> If the organizer will have more than one fireworks display within a 48-hour period, the organizer must file a Notice of Intent containing information about the fireworks to be used, location of launch area and nearby water bodies and groundwater basins, surrounding land

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<sup>21</sup> This condition is intended to alleviate spatial and temporal accumulation of fireworks-related chemical contaminants.

- uses, planned period of and frequency of discharge, copies of any permits obtained from other public agencies, and measures that will be taken to minimize or eliminate the discharge of pollutants that might affect surface water and groundwater quality. Sufficient information must be submitted before the discharge may begin.
2. All fireworks-related debris must be cleaned up from land surface areas.
  3. Launch areas and deposition areas of fireworks displays may not be located within areas designated as Zone A for groundwater source area protection, as defined by the California Department of Public Health's Drinking Water Source Assessment Protection Program. This condition may be waived if the owner or operator of a groundwater drinking water source, through a permit, specifically allows the fireworks display launch area and/or deposition area within an area designated as Zone A for groundwater source area protection.
  4. Launch areas and deposition areas of fireworks displays may not be located within areas designated as Zone A for surface water source protection, as defined by the California Department of Public Health's Drinking Water Source Assessment Protection Program. This condition may be waived if the owner or operator of a surface water source reservoir or intake structure, through a permit, specifically allows the fireworks display launch area and/or deposition area within an area designated as Zone A for surface water protection.
  5. The fireworks display must be permitted by all relevant public agencies that require permits for fireworks displays (e.g., fire departments, municipal governments, law enforcement, water supply agencies). Copies of any permits must be available on site for inspection.
  6. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

9174 Sky Park Court, Suite 100  
San Diego, California 92123-4340



**NOTICE OF INTENT**

TO COMPLY WITH  
CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS  
FOR SPECIFIC TYPES OF DISCHARGE WITHIN  
THE SAN DIEGO REGION

**I. PROPERTY/FACILITY INFORMATION**

|                                   |                |                                 |             |
|-----------------------------------|----------------|---------------------------------|-------------|
| <u>Property/Facility Name:</u>    |                |                                 |             |
| <u>Property/Facility Contact:</u> |                |                                 |             |
| <u>Property/Facility Address:</u> |                |                                 |             |
| <u>City:</u>                      | <u>County:</u> | <u>State:</u>                   | <u>Zip:</u> |
| <u>Telephone:</u>                 | <u>Fax:</u>    | <u>Email:</u>                   |             |
| <u>Assessor Parcel Number(s):</u> |                | <u>Hydrologic Area/Subarea:</u> |             |

**II. PROPERTY/FACILITY OWNER INFORMATION**

|   |                |               |             |
|---|----------------|---------------|-------------|
| <u>Property/Facility Owner Name:</u>            |                |               |             |
| <u>Property/Facility Owner Mailing Address:</u> |                |               |             |
| <u>City:</u>                                    | <u>County:</u> | <u>State:</u> | <u>Zip:</u> |
| <u>Telephone:</u>                               | <u>Fax:</u>    | <u>Email:</u> |             |

**III. PROPERTY/FACILITY OPERATOR INFORMATION**

|   |                |               |             |
|---|----------------|---------------|-------------|
| <u>Property/Facility Operator Name:</u> |                |               |             |
| <u>Mailing Address:</u>                 |                |               |             |
| <u>City:</u>                            | <u>County:</u> | <u>State:</u> | <u>Zip:</u> |
| <u>Telephone:</u>                       | <u>Fax:</u>    | <u>Email:</u> |             |

**IV. CONDITIONAL WAIVER FOR NOTICE OF INTENT**

*Mark (☒) the conditional waiver proposed for the discharge:*

|  |
|--|
| <input type="checkbox"/> <u>Conditional Waiver 1 - Discharges from on-site disposal systems</u>                                |
| <input type="checkbox"/> <u>Conditional Waiver 2 - "Low threat" discharges to land</u>   |
| <input type="checkbox"/> <u>Conditional Waiver 3 - Discharges from animal operations</u>                                       |
| <input type="checkbox"/> <u>Conditional Waiver 4 - Discharges from agricultural and nursery operations</u>                     |
| <input type="checkbox"/> <u>Conditional Waiver 5 - Discharges from silvicultural operations</u>                                |
| <input type="checkbox"/> <u>Conditional Waiver 6 - Discharges of dredged or fill materials nearby or within surface waters</u> |
| <input type="checkbox"/> <u>Conditional Waiver 7 - Discharges of recycled water to land</u>                                    |
| <input type="checkbox"/> <u>Conditional Waiver 8 - Discharges/disposal of solid wastes to land</u>                             |
| <input type="checkbox"/> <u>Conditional Waiver 9 - Discharges/disposal of slurries to land</u>                                 |
| <input type="checkbox"/> <u>Conditional Waiver 10 - Discharges of emergency/ disaster related wastes</u>                       |
| <input type="checkbox"/> <u>Conditional Waiver 11 - Aerially discharged wastes</u>   |

**V. DESCRIPTION OF DISCHARGE**

Describe the discharge (i.e., source(s) of discharge, pollutants of concern, period and frequency, etc.). Use additional pages as needed. Provide a map of the property/facility if necessary.

**VI. DESCRIPTION OF MANAGEMENT MEASURES AND BEST MANAGEMENT PRACTICES**

Describe what management measures (MMs) and best management practices (BMPS) will be implemented to minimize or eliminate the discharge of pollutants to waters of the state. Use additional pages as needed. Provide a map of the property/facility showing locations of MMs/BMPs if necessary.

**VII. ADDITIONAL INFORMATION**

Please provide additional information, as needed or required, about the discharge and/or how the discharger intends to comply with the waiver conditions of the conditional waiver. Use additional pages as needed.

**VIII. CERTIFICATION**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

---

Signature (Owner or Authorized Representative)

---

Date

---

Print Name

---

Title

---

Telephone Number

---

Email



## TEMPORARY WASTE PILE CERTIFICATION

### [SECTION A]

#### I. TEMPORARY WASTE PILE GENERATOR INFORMATION

|                                     |                |               |             |
|-------------------------------------|----------------|---------------|-------------|
| <u>Generator Name:</u>              |                |               |             |
| <u>Generator Contact and Title:</u> |                |               |             |
| <u>Generator Mailing Address:</u>   |                |               |             |
| <u>City:</u>                        | <u>County:</u> | <u>State:</u> | <u>Zip:</u> |
| <u>Telephone:</u>                   | <u>Fax:</u>    | <u>Email:</u> |             |

#### II. WASTE INFORMATION

|   |                   |  |                   |
|---|-------------------|--|-------------------|
| <u>Local Oversight Program Case No.:</u>  |                   | <u>San Diego Water Board File No.:</u> |                   |
| <u>Waste Type:</u> <input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> Other Petroleum Hydrocarbons<br>(check all that apply) <input type="checkbox"/> Other Impacted Dredged Spoils <input type="checkbox"/> Other: _____ |                   |  |                   |
| <u>Contaminant Concentrations (Used additional pages as needed):</u>  |                   |  |                   |
| <u>Mean</u>   | <u>Mean+80%CI</u> | <u>Mean</u>                            | <u>Mean+80%CI</u> |
|   |                   |  |                   |
| <u>Mean</u>   | <u>Mean+80%CI</u> | <u>Mean</u>                            | <u>Mean+80%CI</u> |
|   |                   |  |                   |
| <u>Mean</u>   | <u>Mean+80%CI</u> | <u>Mean</u>                            | <u>Mean+80%CI</u> |
|   |                   |  |                   |
| <u>Waste Pile Quantity (yd<sup>3</sup>):</u>  |                   |  |                   |
| <u>Description of Containment Method:</u>   |                   |  |                   |

#### III. TEMPORARY WASTE PILE SITE INFORMATION

|                                   |                                 |
|-----------------------------------|---------------------------------|
| <u>Site Property Owner Name:</u>  |                                 |
| <u>Site Address:</u>              |                                 |
| <u>City:</u>                      | <u>County:</u>                  |
| <u>State:</u>                     | <u>Zip:</u>                     |
| <u>Telephone:</u>                 | <u>Fax:</u>                     |
| <u>Email:</u>                     |                                 |
| <u>Assessor Parcel Number(s):</u> | <u>Hydrologic Area/Subarea:</u> |

#### IV. PROPERTY OWNER ACKNOWLEDGMENT

*I hereby acknowledge receipt of the waste soil described in section II and that I have reviewed any associated reports. By signing this form I acknowledge that the Generator of this waste has certified that all 8.II.D waiver conditions have been met.*

|   |              |
|---|--------------|
| <u>Signature (Owner or Authorized Representative)</u> | <u>Date</u>  |
| <u>Print Name</u>                                     | <u>Title</u> |

#### V. GENERATOR CERTIFICATION

*I hereby certify that the information provided regarding soil characterization is a complete and accurate representation of the subject soil, and that the soil is not hazardous waste as defined by California Code of Regulations Title 22 and by the U.S. Environmental Protection Agency (Code of Federal Regulations Title 40), and that all 8.II.D waiver conditions have been met.*

|                            |              |
|----------------------------|--------------|
| <u>Generator Signature</u> | <u>Date</u>  |
| <u>Print Name</u>          | <u>Title</u> |



## NOTICE OF TERMINATION

# Title



**V. INERT WASTE SOIL CHARACTERIZATION**

|   |  |  |
|---|--|--|
| <u>Name of Certified Analytical Laboratory:</u>   |  |  |
| <u>Certified Analytical Laboratory Contact:</u>   |  |  |
| <u>Certified Analytical Laboratory Address:</u>   |  |  |
| <u>City:</u>  | <u>County:</u>                                   | <u>State:</u> <u>Zip:</u>                        |
| <u>Telephone:</u>   | <u>Fax:</u>                                      | <u>Email:</u>                                    |
| <u>Number of samples collected for characterization:</u>  |  |  |
| <input type="checkbox"/> <u>Mark the box (☒) to confirm that no samples collected to characterize waste soil as inert contained detectable concentrations of constituents other than Title 22 metals, as required by waiver condition 8.II.F.1.i.</u> |  |  |
| <b><u>Title 22 Metals<br/>Contaminant of Concern</u></b>  | <b><u>EPA Approved<br/>Analytical Method</u></b> | <b><u>90% UCL Concentration<br/>(mg/kg)*</u></b> |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |

*Use additional pages if there are additional contaminants of concern. Attach copy of laboratory analytical report.*

*\* If molybdenum, silver, and/or zinc exceed the Tier 2 SSLs, then the waiver does not apply and a Report of Waste Discharge (RoWD) must be submitted to the San Diego Water Board.*

**VI. ENROLLMENT FOR REUSE OF TIER 1 or TIER 2 INERT WASTE SOIL**

Mark the box (☒) next to the tier that the inert waste soil has been characterized, as supported with data provided in section V.

|   |  |
|---|--|
| <input type="checkbox"/> <b><u>Tier 1 (Complete section X)</u></b><br><u>Management of Tier 1 inert waste soils must comply with waiver conditions 8.II.F.1 and 8.II.F.2.</u> | <input type="checkbox"/> <b><u>Tier 2 (Complete sections VII through X)</u></b><br><u>Management of Tier 2 inert waste soils must comply with waiver conditions 8.II.F.1 and 8.II.F.3.</u> |
|---|--|

**VII. TIER 2 INERT WASTE SOIL IMPORT SITE INFORMATION**

|   |  |
|---|--|
| <u>Import Site Property Owner Name:</u>   |  |
| <u>Import Site Address:</u>   |  |
| <u>City:</u>  | <u>County:</u> <u>State:</u> <u>Zip:</u> |
| <u>Telephone:</u>   | <u>Fax:</u> <u>Email:</u>                |
| <u>Assessor Parcel Number(s):</u>   | <u>Hydrologic Area/Subarea:</u>          |
| <u>Provide a map of the import site showing the location of the nearby surface water bodies and/or water wells, and approximate depth to groundwater.</u> |  |

**VIII. DESCRIPTION OF IMPORT SITE BEST MANAGEMENT PRACTICES**

Describe what management measures (MMs) and best management practices (BMPS) were implemented at the import site to minimize or eliminate the discharge of pollutants to waters of the state. Use additional pages as needed. Provide a map of the property/facility showing locations of MMs/BMPs if necessary.

**IX. PROPERTY OWNER ACKNOWLEDGMENT**

Mark all the boxes (☒) to acknowledge that the applicable Tier 2 inert waste soil waiver conditions have been or will be met:

- ☐ Import site is designated for commercial or industrial land use.
- ☐ Inert waste soil placed at least 5 feet above highest historically known or anticipated level of groundwater.
- ☐ Soil that separates inert waste soil from groundwater has clay content greater than 5 percent and/or in situ permeability of less than  $10^{-5}$  cm/sec.
- ☐ Inert waste soil placed at least 100 feet from the nearest surface water body.
- ☐ Inert waste soil is protected against 100-year peak storm flows as defined by the county flood control agency.
- ☐ Inert waste soil covered by either: 1) engineered materials (e.g. used as road base, fill beneath buildings, bridge abutments), or 2) not less than 2 feet of noncontaminated, clean fill. The cover has a permeability of no more than  $10^{-5}$  cm/sec.
- ☐ Placement of a cover on the inert waste soils completed within 30 days of discharging the final load of inert waste soils at the import site.

I acknowledge the receipt or planned receipt of the waste soil described in sections V and VI and that the soil will be managed pursuant to the restrictions set forth in waiver conditions 8.II.F.3.

\_\_\_\_\_  
Signature (Owner or Authorized Representative)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

**X. GENERATOR AND CONSULTANT CERTIFICATION**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

\_\_\_\_\_  
Print Name (Generator)

\_\_\_\_\_  
Print Name (Consultant)

\_\_\_\_\_  
Signature (Generator)

\_\_\_\_\_  
Signature (Consultant)

\_\_\_\_\_  
Title (Generator)

\_\_\_\_\_  
Title and Professional Registration No. (Consultant)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

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**~~APPENDIX D~~**

**~~CONDITION(S) FOR CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS OF ITEMS IN TABLE 4-4~~**

**~~CONDITIONS FOR ITEM 21. SHORT-TERM USE OF RECLAIMED WATER:~~**

- ~~1. Short-term water reclamation projects are projects that last one year or less. Short-term projects can include temporary use of reclaimed water for dust control, soil compaction, green belt irrigation, or any other temporary reuse project authorized by the Executive Officer, for which no permanent physical reclaimed water facilities or structures are installed; and~~
- ~~2. The reclaimed water producer must submit a written request for a waiver to the Regional Board. This request must include written notification from the local health department or the State Department of Health Services that the proposed project complies with all local and State health requirements for reclaimed water use and Title 22, Division 4, Chapter 3, Reclamation Criteria, Articles 1 – 10. This written notification shall also specify any monitoring required to demonstrate compliance with Title 22, Division 4, Chapter 3, Articles 2, 3, 4, 5, and 5.1. A new written request for a waiver must be submitted to the Regional Board if the temporary project exceeds one year. New written requests must be received 60 days prior to expiration of the one year project. If no new request is received the short-term project must cease immediately.~~

**~~CONDITIONS FOR ITEM 19. TEMPORARY DISCHARGE OF SPECIFIED CONTAMINATED SOILS:~~**

~~a. General Conditions for All Temporary Waste Piles~~

- ~~(1) **Required Notification of the Regional Board:** The discharger shall send the Regional Board a signed/completed certification report (Section A: Temporary Waste Pile Waiver Certification Form), **within 30 days** of the initial discharge of any waste piles established under this waiver. The discharger shall send the Regional Board a signed/completed certification report (Section B: Temporary Waste Pile Waiver Certification Form) **within 10 working days** of completing removal of all waste and restoring the site to its original condition.~~
- ~~(2) This waiver specifically does not apply to hazardous waste, as defined in Section 66261.3, Division 4.5, Title 22 of the California Code of Regulations, or as amended.~~
- ~~(3) **Prohibitions:** The discharge of waste shall not:~~
  - ~~a. Cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin;~~

- ~~b. Cause the occurrence of objectionable tastes and odors in water pumped from basin;~~
- ~~c. Cause waters pumped from the basin to foam;~~
- ~~d. Cause the presence of toxic materials in waters pumped from the basin;~~
- ~~e. Cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0;~~
- ~~f. Cause pollution, contamination or nuisance or adversely affect beneficial uses of ground or surface waters of the hydrologic subareas established in the Basin Plan.~~
- ~~g. Cause a violation of any discharge prohibitions in the Basin Plan for the San Diego Region.~~

~~(4) **Site Conditions:** All parcels of land/property containing a temporary discharge of solid wastes, temporary waste piles as identified in the specific conditions of this waiver, shall meet the following minimum general site conditions:~~

- ~~a. Runon/Runoff Protection: Surface drainage shall be diverted from the temporary waste piles. For all waste piles, the dischargers shall implement effective Best Management Practices (BMPs) to prevent surface water runon and runoff from contacting wastes and to prevent erosion and transport of wastes by surface runoff.~~
- ~~b. Groundwater Protection: All waste piles shall be placed at least five feet above the highest anticipated level of groundwater.~~
- ~~c. Surface Water Protection: All waste piles established under this waiver shall be located not less than 100 feet from any surface water identified in the Basin Plan.~~
- ~~d. Flood Plain Protection: All waste piles shall be protected against 100-year peak stream flows as defined by the County flood control agency.~~

~~(5) **Inspection and Maintenance:** Wastes discharged to waste piles established under this waiver, together with any containment materials used at the temporary waste pile, and any underlying geologic materials contaminated by the discharge, shall be removed within the maximum time period allowed under the applicable Special Conditions. Subsequently the site shall be restored to its original state within 30 days following the removal of all treatment facilities, related equipment, etc. and shall be disposed of or stored in accordance with applicable regulations.~~

~~(6) **Clean Closure Required:** Wastes discharged to waste piles established under this waiver, together with any containment materials used at the temporary waste pile, and any underlying geologic materials contaminated by the discharge, shall be removed within the~~

~~maximum time period allowed under the applicable special conditions. Subsequently, the discharger shall remove all wastes, treatment facilities, related equipment, and dispose of those items in accordance with applicable regulations. The site shall be restored to its original state within maximum time period allowed under the applicable special conditions.~~

~~(7) **Management of Return or Ponded Water:** If return water or ponded water contained within the treatment or storage area of the temporary waste pile will be disposed of at a location other than to a sanitary sewer system, then the discharger shall submit written notification to the Executive Officer prior to initiating the discharge and either: 1) obtain waste discharge requirements; 2) obtain a waiver of waste discharge requirements or 3) obtain a written determination from the Regional Board Executive Officer that the disposal of the return water or ponded water is not subject to regulation by the Regional Board.~~

~~(8) **Property Owner Acknowledgment:** By written correspondence to the Regional Board Executive Officer, the property owner shall approve the placement of the waste (temporary waste piles) at the site.~~

~~(9) **Public Notification Requirement:** The discharger shall post at least one clearly visible, sign (in english) listing the following minimum information: a.) project name, b.) name and address of discharger, c.) brief project description, and d.) 24-hour contact information — name, address, facsimile, and telephone number for the project. The discharger shall post additional signs as necessary (in languages other than english) to more effectively communicate the minimum contact information (listed above) to the local community. The sign(s) shall be maintained as required to keep them legible and remain in place while temporary waste piles remain on site.~~

~~(10) All sampling and analytical procedures, including documentation of waste characterization, shall be in accordance with the indicated methods described in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, U.S. Environmental Protection Agency (current edition). Reported concentrations levels shall be mean average, with an 80% upper confidence interval, and the total range within each constituent.~~

~~(11) **Obligation to Comply:** This waiver from waste discharge requirements (WDRs) does not relieve dischargers of the obligation to comply with any other applicable local, state and federal requirements.~~

~~(12) **Relation of this Conditional Waiver to Other Authority of the RWQCB:** This action waiving the issuance of WDRs is conditional, may be terminated for any type of discharge at any time, does not permit an illegal discharge, and does not preclude the Regional Board from administering enforcement remedies pursuant to Section 13304 of the California Water Code. Where the staff of this Regional Board considers the adoption of WDRs for a specific discharge of a type identified herein to be in the public interest, staff will draft tentative waste discharge requirements for consideration by the Regional Board.~~

~~b. Special Conditions Applicable to Waste Piles for Treatment or Storage of Soils Contaminated with Petroleum Hydrocarbons~~

- ~~(1) Temporary waste piles established under this waiver shall be limited to a maximum time period of four months or 90 days.~~
- ~~(2) All solid wastes discharged into temporary waste piles established under the waiver shall be derived from only one source (e.g., unauthorized release site).~~
- ~~(3) **Cover:** All waste piles shall be overlain by plastic sheeting (not less than 10 mils thick) to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances.~~
- ~~(4) All waste piles shall be underlain by either plastic sheeting (not less than 10 mils thick) or a liner of low permeability approved by the Regional Board Executive Officer.~~
- ~~(5) In addition to the general and specific conditions stated herein, waste piles shall conform to applicable provisions in the state's Local Oversight Program (LOP) for Orange, Riverside, or San Diego Counties.~~
- ~~(6) **Site Closure:** Any waste pile established under these Special Conditions for Petroleum Contaminated Soils, together with any containment materials used for the temporary waste pile and underlying geologic materials contaminated by the discharge, shall be removed and the site shall be restored to its original state within 30 days.~~

~~c. Special Conditions Applicable to Waste Piles for Treatment or Storage of Dredge Spoils Contaminated with Heavy Metals~~

- ~~(1) All temporary waste piles established under this waiver shall be limited to a maximum time period of nine months or 210 days.~~
- ~~(2) **Cover:** All waste piles shall be overlain by either a plastic sheeting to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances. Alternative control methods shall be subject to approval by the Regional Board Executive Officer.~~
- ~~(3) **Liner:** All waste piles shall be underlain by plastic sheeting (not less than 20 mils thick) or a liner of lower permeability approved by the Regional Board Executive Officer. The liner and containment facility shall be designed to contain all solid wastes and fluids, and shall be subject to approval by the Regional Board Executive Officer.~~
- ~~(4) **Containment Structures:** Materials used in containment structures shall have the appropriate chemical and physical properties to ensure that such structures do not fail to contain waste because of: the stress of installation, pressure gradients, physical contact with the waste or leachate, or chemical reactions with soil and rock.~~
- ~~(5) **Site Closure:** Any waste pile established under these Special Conditions for Dredge Spoils, together with any containment materials used for the temporary waste pile~~

~~and underlying geologic materials contaminated by the discharge, shall be removed and the site shall be restored to its original state within 60 days.~~

**~~CONDITIONS FOR ITEM 20. COMPOSTING AND PROCESSING, MULCHING, OR GRINDING FACILITIES~~**

**~~A. APPLICABILITY~~**

**~~1. Types of Facilities~~**

- ~~a. Facilities composting Green Waste, Agricultural Waste, Food Processing Waste or Paper Waste~~
- ~~b. Facilities processing, mulching or grinding Green Waste, or Agricultural Waste~~

**~~2. Size of Facilities~~**

- ~~a. Composting and Processing, Mulching, or Grinding Operations Less than Five Hundred (500) Cubic Yards~~

~~The submittal of a report of waste discharge and the issuance of waste discharge requirements are waived for discharges from the following:~~

- ~~(1) Green waste, food processing waste, agricultural waste, or paper waste composting operations that do not exceed five hundred (500) cubic yards at any given time;~~
- ~~(2) Green waste or agricultural waste processing, mulching or grinding operations that do not exceed a total volume of five hundred (500) cubic yards at any given time.~~

- ~~b. Composting and Processing, Mulching, or Grinding Operations Greater than Five Hundred (500) Cubic Yards~~

~~For dischargers who comply with the following *Reporting, Site, Operational, and General Conditions*, the issuance of waste discharge requirements are waived for discharges resulting from the following:~~

- ~~(1) The storage and treatment by composting of greater than five hundred (500) cubic yards at any given time of green waste, food processing waste, agricultural waste, or paper waste, and any additives as approved by the RWQCB; or~~
- ~~(2) The storage and treatment by processing, mulching, or grinding of greater than five hundred (500) cubic yards of green waste, or agricultural waste.~~

**B. REPORTING CONDITIONS**

**1. Report of Waste Discharge**

~~The discharger shall file a report of waste discharge that includes a technical report containing a requirement-by-requirement analysis based on acceptable engineering standards and best management practices, of how the process and physical designs of the facility will ensure compliance with the conditions listed herein. The discharger shall submit a fee pursuant to CCR Title 23, Section 2200 for a Threat to Water Quality and Complexity Rating 3-C, Chapter 15.~~

**2. General Industrial Storm Water Permit**

~~The discharger shall file either a Notice of Intent to comply with the requirements set forth in State Water Resources Control Board (SWRCB) NPDES General Permit No. CAS000001 for the discharge of storm water or submit documentation that the NPDES storm water permit requirements are not applicable to the discharger's facility.~~

**3. Changes in Operation**

~~The discharger shall notify the RWQCB of:~~

- ~~a. any significant change in the nature and quantity of waste composted or processed, area of operation, or season of operation; or~~
- ~~b. termination of operation.~~

**C. SITE CONDITIONS**

**1. Control and Management**

~~All areas upon which green waste, food processing waste, agricultural waste, or paper waste and any feedstock additives are discharged for composting or processing, mulching, grinding, storing and treating shall be designed, constructed and maintained to prevent the degradation of waters of the state. Such facility operations shall be equivalent to the water quality protection achieved through the implementation of the following measures:~~

~~**a. Precipitation**~~

~~All precipitation and surface drainage from outside the compost, process, treatment or storage areas including that collected from roofed areas, and runoff from tributary areas resulting from a 25-year, 24-hour storm shall be diverted away from the such areas.~~

~~**b. Runoff**~~

~~The discharger shall develop and implement a plan to reduce or eliminate the discharge of pollutants into surface waters including storm water. The plan shall describe measures taken to prevent contaminated process water and reduce or eliminate contaminated storm water from being discharged from the site.~~

~~**c. Water Quality Protection**~~

~~All compost, process and storage areas shall be sited where soil characteristics, distance from waste to ground water, and other factors will ensure no impairment of beneficial uses of surface waters or ground waters beneath or adjacent to the facility.~~

~~d. *Stream Flow*~~

~~The facilities shall be protected from inundation or washout by overflow from any stream channel during a 25-year peak stream flow.~~

~~e. *Surface Maintenance*~~

~~If the equipment operating near or on compost, process, storage, or treatment areas produces subsidence, cracking, or otherwise compromises any surface, the discharger shall repair any damaged areas immediately.~~

~~**D. OPERATIONAL CONDITIONS**~~

~~**1. *Additives***~~

~~Dischargers who use additives as defined in this document shall report to the RWQCB's Executive Officer for his approval the type, and quantity of the additive. The use of additives shall comply with the *CONDITIONS* listed in this document.~~

~~**2. *Discharge Specifications***~~

~~The discharge of green waste, food processing waste, agricultural waste, or paper waste for storage and treatment by composting or processing, grinding, or mulching shall not cause or threaten to cause a condition of contamination, pollution or nuisance.~~

~~**3. *Maintenance***~~

~~Containment structures such as embankments, liners or surface impoundments shall be maintained in order to ensure proper performance whenever wastes are discharged.~~

~~**4. *Wet Weather Preparations***~~

~~Prior to the rainy season, the discharger shall conduct a survey of the operation to ensure that the site has been graded and prepared to prevent erosion and to prevent ponding of waste water at any location not designed and operated to retain water.~~

~~**5. *Inspections***~~

~~The discharger shall inspect compost, process, storage and treatment areas for emergence of leachate, ponding, or surface failures such as cracking or subsidence; such inspections shall be frequent enough to ensure compliance with the Conditions of this waiver. If visible leachate, ponding, cracking, or subsidence of surfaces is observed, the discharger shall immediately take necessary measures to maintain the performance standards described in *SITE CONDITIONS C*.~~

~~**E. GENERAL CONDITIONS**~~

~~**1. *Prohibitions***~~

~~The inclusion of the following wastes for treatment by composting or processing under the conditions of this~~

~~waiver are prohibited:~~

- ~~a. municipal solid waste;~~
- ~~b. sludges (including sewage sludge, water treatment sludge, and industrial sludge);~~
- ~~c. septage;~~
- ~~d. liquid wastes, unless specifically approved by the Regional Board;~~
- ~~e. animal waste, except manure when used as an additive;~~
- ~~f. oil and grease; and~~
- ~~g. hazardous, designated, and any other wastes determined by the Regional Board to pose a potential threat to water quality.~~

## **~~2. Entry and Inspection~~**

~~The discharger shall allow the RWQCB, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:~~

- ~~a. Enter upon the discharger's premises where a conditionally waived facility or activity is located or conducted, or where records must be kept under the conditions of this waiver;~~
- ~~b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this waiver;~~
- ~~c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this waiver; and~~
- ~~d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this waiver or as otherwise authorized by the California Water Code, any substances or parameters at any location.~~

## **~~DEFINITION OF TERMS IN CONDITIONS FOR ITEM 20~~**

**~~GREEN WASTE:~~** Material that consists of or contains waste from plants, including leaves, clippings, cuttings, trimmings of grass, weeds, shrubbery, bushes, or trees, residential or community garden wastes, and untreated wood wastes.

**~~FOOD PROCESSING WASTE:~~** Material that consists of or contains only pre-processed and post-processed waste derived from plants, or foods processed or produced at restaurants, hospitals and food distributors.

**~~AGRICULTURAL WASTE:~~** Material that consists of the plant waste coming directly from an agricultural commodity, and is the product of farms and ranches and by-products processed from these products, as defined in Division 21, Part 2, Chapter 1 Section 58619 of the Food and Agriculture Code. Agricultural waste includes agricultural, floricultural, silvicultural, vermicultural or viticultural products.

**~~PAPER WASTE:~~** Material that consists of nonhazardous paper and paper by-products.



~~**ADDITIVE:** Material that consists of waste or products which are approved by the RWQCB's Executive Officer for mixture with feedstock or treated waste to adjust the moisture level, the carbon to nitrogen ratio, or the porosity of the wastes to create a condition favorable to the processing, or to improve the end product. Additives may include manures, fertilizers, and chemical amendments.~~

~~**DISCHARGER:** Any person who discharges waste which could affect the quality of waters of the state, and includes any person who owns a waste management unit or who is responsible for the operation of a waste management unit pursuant to Title 23, California Code of Regulations, Section 2601.~~

~~**CONDITIONS FOR ITEM 22. PERMANENT RECLAIMED WATER PROJECTS:**~~

- ~~1. The discharger shall submit a report of waste discharge pursuant to Section 13260 or 13522.5 of the California Water Code. This report shall contain sufficient technical information from which the Regional Board can determine if the proposed discharge complies with all applicable reclamation regulations; and~~
- ~~2. The proposed discharge of reclaimed water must be in compliance with the California Code of Regulations, Title 22, Division 4, Chapter 3, Articles 1—10; and~~
- ~~3. The proposed discharge of reclaimed water must be in compliance with the Water Quality Control Plan, San Diego Basin (9); and~~
- ~~4. The report of waste discharge must contain a letter from the local health department of the State Department of Health Services stating that the proposed project complies with all State and local Health requirements for the use of reclaimed water. This letter shall also specify any monitoring required to demonstrate compliance with Title 22, Division 4, Chapter 3, Reclamation Criteria, Articles 2, 3, 4, 5 and 5.1; and~~
- ~~5. Temporary waiver's of waste discharge requirements remain in effect for a project until the Regional Board is able to adopt permanent requirements. The Regional Board will adopt requirements, as appropriate, at the earliest possible opportunity, and in accordance with Regional Board priorities.~~

## **Conditional Waiver No. 2 – “Low Threat” Discharges to Land**

Conditional Waiver No. 2 is for “low threat” discharges to land, which can percolate to groundwater. “Low threat” discharges include liquid wastes containing pollutant concentrations that are not expected to adversely impact the quality of waters of the state under ambient conditions. “Low threat” discharges may include potable water or uncontaminated groundwater. Potable water and uncontaminated groundwater are not considered waste when initially discharged. However, when it comes into contact with pollutants and transports those pollutants in surface runoff or leaches those pollutants into the soil and groundwater, it becomes a waste. “Low threat” discharges to land are not expected to contain significant concentrations of pollutants that can adversely affect the quality of underlying groundwater.

The following types of discharge not regulated or authorized under WDRs may be eligible for Conditional Waiver No. 2:

- Discharges from the construction and test pumping of water wells to land
- Discharges of air conditioner condensate or non-contact cooling water to land
- Swimming pool discharges to land
- Discharges from short-term construction dewatering operations to land
- “Low Threat” discharges to land and/or groundwater, which may including the following:
  - Groundwater pumped from drinking water wells
  - Groundwater from foundation drains, crawl space pumps, and footing drains
  - Discharges from flushing water lines
  - Discharges from washing vehicles, pavement, buildings, etc.
  - Infiltration from residential/commercial/industrial/recreational facility landscape and lawn irrigation using groundwater or municipal supply water
  - Infiltration from structural infiltration-based best management practices (BMPs)

“Low threat” discharges are not expected to adversely affect the quality of groundwater. These types of discharge have similar properties, threat to water quality, and waiver conditions. Therefore, these types of “low threat” discharges to land were grouped together into one discharge classification. Discharges that comply with the waiver conditions are not expected to pose a threat to the quality of waters of the state.

Low volumes and infrequent “low threat” discharges are not expected to adversely affect the quality of groundwater because the water would likely evapotranspire before infiltrating to the underlying groundwater. However, excessive volumes or frequent “low threat” discharges could potentially infiltrate to underlying groundwater and adversely affect the quality of groundwater over time. With proper management, “low threat” discharges to land are not expected to pose a threat to the quality of waters of the state. Therefore, waiver conditions must require proper management of “low threat” discharges to land to minimize or eliminate the discharge of pollutants to waters of the state.

Waiver conditions should be developed in order for members of the public, cities, counties, local agencies and organizations, and/or the San Diego Water Board to determine if any “low threat” discharges to land pose a threat to the quality of the waters of the state. If owners/operators with “low threat” discharges are not in compliance with waiver conditions, they can be issued a Notice of Violation and required to correct deficiencies in order to be eligible for Conditional Waiver No. 2. However, if the owner/operator of a “low threat” discharge violates any waiver conditions, the San Diego Water Board has the option to terminate the conditional waiver for the discharge and begin regulating with individual WDRs and/or take other enforcement actions.

In order to be eligible for Conditional Waiver No. 2, discharges must comply with certain conditions to be protective of water quality. The waiver conditions applicable to “low threat” discharges to land include the following:

- 2.I.A. General Waiver Conditions for “Low Threat” Discharges of Water to Land
- 2.II.A. Specific Waiver Conditions for Air Conditioner Condensate and Non-contact Cooling Water Discharges to Land
- 2.II.B. Specific Waiver Conditions for Swimming Pool Discharges to Land
- 2.II.C. Specific Waiver Conditions for Pumping of Groundwater from Wells to Land
- 2.II.D. Specific Waiver Conditions for Dewatering Operations Discharged to Land
- 2.II.E. Specific Waiver Conditions for Discharges from Washing Vehicles, Pavement, Buildings, etc. to Land
- 2.II.F. Specific Waiver Conditions for Discharges from Irrigated Lawns and Landscaping Using Groundwater or Municipal Supply Water
- 2.II.G. Specific Waiver Conditions for Discharges from Structural BMPs that Require Infiltration

“Low threat” discharges to land that comply with the general and specific waiver conditions in Conditional Waiver No. 2 are not expected to pose a threat to the quality of waters of the state.

**2.I.A. General Waiver Conditions for “Low Threat” Discharges of Water to Land**

1. Prevent the direct or indirect discharge of “low threat” discharges to any surface waters of the state (including ephemeral streams and vernal pools).
2. “Low threat” discharges must not cause the migration of contaminants such as chlorinated solvents, hydrocarbons, or other toxic or hazardous substances to groundwater.
3. “Low threat” discharges must not come in contact with any material that consists of or is contaminated with chlorinated solvents, hydrocarbons, or other toxic or hazardous substances prior to discharge to land.
4. Any products used to condition or treat “low threat” discharges prior to discharging to land must be in accordance with manufacturer’s instructions and guidelines, and must reliably attenuate before infiltrating to underlying groundwater.

5. "Low threat" discharges to land must not adversely affect the quality or beneficial uses of underlying groundwater.
6. "Low threat" discharges to land must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
7. "Low threat" discharges to land must not adversely impact the quality or beneficial uses of groundwater in any water wells.
8. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
9. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

***2.II.A. Specific Waiver Conditions for Air Conditioner Condensate and Non-contact Cooling Water Discharges to Land***

1. Discharges must not contain contact cooling water.
2. Discharges of air conditioner condensate and non-contact cooling water to land must not exceed an average of 1,200 gallons per day for any continuous 365-day period, unless the discharger has filed a Notice of Intent containing information about the operator, location, and planned period of and average daily volume of discharge.

***2.II.B. Specific Waiver Conditions for Swimming Pool Discharges to Land***

1. Discharges of water from each swimming pool to land must not exceed 50,000 gallons during any continuous 365-day period, unless the discharger has filed a Notice of Intent containing information about the swimming pool location and volume, planned period of and frequency of discharge.

***2.II.C. Specific Waiver Conditions for Pumping of Groundwater from Wells to Land***

1. The discharge of groundwater pumped from any well that is used in a soil and/or groundwater contamination investigation or corrective action may not be discharged to land, unless the discharger has filed a Notice of Intent containing monitoring data demonstrating that the quality of the proposed discharge would not cause the groundwater at the disposal site to exceed water quality objectives.
2. For multiple applications of groundwater from wells pumped to land over a 365-day period, or a continuous 24-hour (or longer) application of groundwater from wells pumped to land within a 365-day period, the discharger must file a Notice of Intent containing information about the operator, location, planned period of and frequency of discharge, and measures that will be taken to minimize or eliminate the discharge of pollutants that might affect surface water and groundwater quality. Sufficient information demonstrating compliance with waiver conditions must be submitted before the discharge may begin.
3. Groundwater cannot originate from an area that contains any contaminated soil or groundwater.

**2.II.D. Specific Waiver Conditions for Dewatering Operations Discharged to Land**

1. The discharge of groundwater pumped from any well or excavation that is used in a soil and/or groundwater contamination investigation or corrective action may not be discharged to land, unless the discharger has filed a Notice of Intent containing monitoring data demonstrating that the quality of the proposed discharge would not cause the groundwater at the disposal site to exceed water quality objectives..
2. For dewatering operations that discharge an average of 5,000 gallons per day for any continuous 180-day period, the discharger must file a Notice of Intent containing information about the operator, location, planned period and rate of discharge, and measures that will be taken to minimize or eliminate the discharge of pollutants that might affect groundwater quality. Sufficient information demonstrating compliance with waiver conditions must be submitted before the discharge may begin.
3. Groundwater cannot originate from an area that contains any contaminated soil or groundwater.

**2.II.E. Specific Waiver Conditions for Discharges from Washing Vehicles, Pavement, Buildings, etc. to Land**

1. Discharges of wash water and similar intermittent discharges must not exceed an average of 1,200 gallons per day for any continuous 30-day period, unless the discharger has filed a Notice of Intent containing information about the operator, location, and planned period of and average daily volume of discharge.

**2.II.F. Specific Waiver Conditions for Discharges from Irrigated Lawns and Landscaping Using Groundwater or Municipal Supply Water**

1. Products applied to lawns and landscaping must be in accordance with manufacturer's instructions and guidelines, and must reliably attenuate before infiltrating to underlying groundwater.

**2.II.G. Specific Waiver Conditions for Discharges from Structural BMPs that Require Infiltration.**

1. Installation of structural BMP that utilizes infiltration must comply with the design criteria of the municipality regulated by MS4 WDRs (NPDES storm water permit), **or**, for any discharge that exceeds an average of 1,200 gallons per day for any continuous 365-day period, the discharger must file a Notice of Intent containing documentation demonstrating that the quality of the proposed discharge from infiltration will not cause the groundwater at the disposal site to exceed water quality objectives.
2. Installation of structural BMPs that require infiltration must comply with local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.

## D.10 Statewide Permits, WDRs or Waivers

WQO-2003-0003-DWQ. General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality

Order No. 2006-0008-DWQ NPDES CAG990002 General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters

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**STATE WATER RESOURCES CONTROL BOARD  
WATER QUALITY ORDER NO. 2003 – 0003 - DWQ**

**STATEWIDE GENERAL WASTE DISCHARGE  
REQUIREMENTS (WDRs) FOR DISCHARGES TO LAND WITH  
A LOW THREAT TO WATER QUALITY (GENERAL WDRs)**

The State Water Resources Control Board (SWRCB) finds that:

1. Section 13260(a) of the California Water Code (CWC) requires that any person discharging waste or proposing to discharge waste within any region, other than to a community sewer system, which could affect the quality of the waters of the State<sup>1</sup>, file a report of waste discharge (ROWD).
2. The discharges to land with a low threat to water quality listed in Table 1 are low volume discharges with minimal pollutant concentrations and are disposed of by similar means. These discharges are appropriately regulated under General WDRs.

**Table 1. Categories of Low Threat Discharges**

| <b>CATEGORY</b>  |
|--|
| <b>Wells/Boring Waste</b>  |
| Well Development Discharge   |
| Monitoring Well Purge Water Discharge  |
| Boring Waste Discharge   |
| <b>Clear Water Discharges</b>  |
| Water Main/ Water Storage Tank/ Water Hydrant Flushing                         |
| Pipelines/Tank Hydrostatic Testing Discharge                                   |
| Commercial and Public Swimming Pools   |
| <b>Small Dewatering Projects</b>   |
| Small /Temporary Dewatering Projects (such as excavations during construction) |
| <b>Miscellaneous</b>   |
| Small Inert Solid Waste Disposal Operations                                    |
| Cooling Discharge  |

See Attachment 1 to these General WDRs for discharge category definitions.

3. All WDRs must implement the Regional Water Quality Control Board (Regional Board) Water Quality Control Plan (Basin Plan) for the Region affected by the discharge. These General WDRs require Dischargers to comply with all applicable Basin Plan provisions, including any prohibitions and water quality objectives governing the discharge.

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<sup>1</sup> “Waters of the State” as defined in CWC Section 13050(e)



4. These General WDRs establish minimum standards for the discharges listed in Table 1. The Discharger must comply with any more stringent standards in the applicable Basin Plan. In the event of a conflict between the provisions of these General WDRs and the applicable Basin Plan, the more stringent provision prevails.
5. The beneficial uses for the groundwaters of the State include, but are not limited to: municipal supply (MUN), industrial service supply (IND), industrial process supply (PROC), fresh water replenishment (FRESH), groundwater recharge (GWR), and agricultural supply (AGR).
6. The discharges listed in Table 1 have the lowest Threat to Water Quality (TTWQ) and Complexity, as defined in Section 2200, Title 23 of the California Code of Regulations (CCR). Discharges with the lowest TTWQ are those discharges of waste that could degrade water quality without violating water quality objectives or cause a minor impairment of designated beneficial uses. Low threat discharges that do not require any chemical, biological, or physical treatment have the lowest Complexity rating.
7. Dischargers seeking coverage under these General WDRs must file with the appropriate Regional Board: (a) a Notice of Intent (NOI) to comply with the terms and conditions of these General WDRs or a ROWD<sup>2</sup>, (b) the applicable first annual fee as required by Title 23, CCR, Section 2200, (c) a project map, (d) evidence of California Environmental Quality Act (CEQA) compliance, and (e) a discharger monitoring plan. Upon review by Regional Board staff, a determination will be made as to whether or not coverage under these General WDRs is appropriate. The Discharger will be notified by a letter from the Regional Board Executive Officer<sup>3</sup> when coverage under these General WDRs has begun.
8. Dischargers with low threat discharges listed in Table 1 currently covered by waivers or individual WDRs need not apply for coverage under these General WDRs unless requested to do so by the Regional Board.
9. Although a discharge may be eligible for coverage under these General WDRs, the Regional Board may elect to regulate the discharge under other WDRs or a conditional waiver. If the Regional Board has established WDRs or a conditional waiver, these General WDRs are not applicable.
10. The following discharge categories from Table 1 are exempt from SWRCB promulgated Title 27 requirements: Wells/Boring Waste Discharges, Clear Water Discharges, Small Dewatering Projects, and Cooling Discharges (Section 20090).

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<sup>2</sup> If a ROWD is submitted instead of an NOI, the discharger must complete Sections VII-XV and XVII of the NOI (Attachment 3) and submit them to the Regional Board.

<sup>3</sup> Regional Board Executive Officer or designee.

11. Title 27, Section 20230 of CCR exempts dischargers of inert solid wastes from the requirement to discharge at classified solid waste sites. Section 20230 also gives Regional Boards the option to assign individual or general WDRs for inert solid waste discharges.
12. Discharges to lands that have been listed as hazardous materials sites, pursuant to Government Code Section 65962.5, are not eligible for coverage under these General WDRs. Discharges that will significantly physically divide an established community, significantly conflict with any applicable land use plan/policy/regulation of an agency with jurisdiction over the project, or significantly conflict with any applicable habitat/community conservation plan are not eligible for coverage under these General WDRs.
13. Discharges that could have a significant impact on Biological Resources<sup>4</sup>, Cultural Resources<sup>5</sup>, Aesthetics<sup>6</sup>, Air Quality<sup>7</sup> or that could significantly alter the existing drainage pattern of the discharge site or surrounding area are not eligible for coverage under these General WDRs.
14. Small inert waste disposal operations and small temporary dewatering operations located on unstable geologic units/soils or expansive soils are not eligible for coverage under these General WDRs. Small inert waste disposal operations and small temporary dewatering operations that could significantly conflict with existing zoning for agriculture use or a Williamson Act contract are not eligible for coverage under these General WDRs.
15. Small inert waste disposal operations that are within the boundaries of a comprehensive airport land use plan or, if a comprehensive airport land use plan has not been adopted, within two nautical miles of a public airport or public use airport are not eligible for coverage under these General WDRs.
16. A Negative Declaration in compliance with CEQA has been adopted for these General WDRs. The environmental impacts from new discharges authorized by these General WDRs have been found to be less than significant.
17. Potential Dischargers and all other known interested parties have been notified of the intent to prescribe WDRs as described in these General WDRs.
18. All comments pertaining to the proposed discharges have been heard and considered in a public meeting.

IT IS HEREBY ORDERED, that the Discharger, in order to meet the provisions contained in Division 7 of CWC and regulations adopted thereunder, shall comply with the following:

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<sup>4</sup> As defined by the CEQA, Environmental Checklist Form, Title 14, California Code of Regulation, Appendix G, Section IV.

<sup>5</sup> As defined by the CEQA, Environmental Checklist Form, Title 14, California Code of Regulation, Appendix G, Section V.

<sup>6</sup> As defined by the CEQA, Environmental Checklist Form, Title 14, California Code of Regulation, Appendix G, Section I.

<sup>7</sup> As defined by the CEQA, Environmental Checklist Form, Title 14, California Code of Regulation, Appendix G, Section III

## **A. PROHIBITIONS:**

1. The discharge of any waste to surface waters is prohibited.
2. The disposal of wastes shall not cause pollution, contamination, or nuisance as defined in CWC Section 13050.
3. Discharge of wastes to lands not owned or controlled by the discharger is prohibited, unless the discharger has a written lease or an agreement with the owner.
4. The discharge of waste classified as “hazardous” or “designated” as defined in Title 22 CCR, Section 66261 and CWC Section 13173, is prohibited.
5. The discharge of waste shall not cause, wholly or in combination with any other discharge(s), the applicable Regional Board’s Basin Plan objectives for ground or surface waters to be exceeded.
6. The discharge of waste causing the spread of groundwater contamination is prohibited.
7. The discharge of water main, water storage tank, water hydrant pipeline flushing, or hydrostatic testing water from tanks or pipelines that have been used to store or convey any medium other than potable water is prohibited, unless the Discharger has demonstrated to the Regional Board that all residual pollutant concentrations have been reduced to levels below Regional Board Basin Plan groundwater quality objectives.
8. The discharge of wastes at Small Inert Solid Waste Disposal Operations that are not listed in Attachment 2 to these General WDRs or approved by the Regional Board is prohibited.

## **B. DISCHARGE SPECIFICATIONS:**

Table 1 discharges, except monitoring well purge water and boring waste dischargers, shall not contain concentrations of pollutants in excess of the Basin Plan ground water quality objectives. Dischargers of boring waste shall not threaten an exceedance of applicable Basin Plan ground water quality objectives.

## **C. PROVISIONS:**

1. The following provisions apply to Small Inert Solid Waste Operations:
  - a. Inert solid waste facilities shall only accept inert solid wastes that are listed in Attachment 2 to these General WDRs or that are approved by the Regional Board.

- b. Access to the facility shall be limited to ensure that all types of inert solid wastes accepted at the site are in compliance with these General WDRs.
  - c. Inert solid waste facilities shall develop and implement a load checking program to ensure that all the types of waste accepted at the site are in compliance with these General WDRs.
- 2. Discharges of boring waste, drilling mud, and cuttings from well-drilling operations shall be discharged to on-site sumps and shall not contain halogenated solvents. At the end of drilling operations, the Discharger shall either:
  - a. Remove all wastes from the sump; or
  - b. Remove all free liquid from the sump and cover residual solid and semi-solid wastes, provided that representative sampling of the sump contents after liquid removal shows residual solid wastes to be nonhazardous. Residual wastes shall be disposed at the proper Title 27, CCR classified waste disposal facility or onsite. Residual wastes discharged onsite shall meet the following requirements: (1) the discharge must be located greater than 5 feet above local groundwater level, (2) the discharge must be covered by a minimum of 1 foot of clean soil, and (3) the discharge must be located at least 100 feet from the nearest surface water. If the sump has appropriate containment features, it may be reused.
- 3. Monitoring well purge water shall be discharged at the monitoring well facility<sup>8</sup> and shall not degrade underlying groundwater. Monitoring well purge water shall not be discharged in a manner causing ponding or threatening a discharge to surface waters.
- 4. A minimum freeboard of two feet shall be maintained at all wastewater disposal ponds and wastewater storage ponds.
- 5. All storage and disposal facilities shall be protected against erosion, overland runoff, and other impacts resulting from storm events.
- 6. Dischargers applying for coverage under these General WDRs shall submit with their NOI a discharge monitoring plan (DMP). The DMP shall include the following information:
  - a. All pollutants believed to be present in the discharge
  - b. Approximate concentration of pollutants in the discharge
  - c. Monitoring locations
  - d. Monitoring frequencies

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<sup>8</sup> A facility where monitoring well(s) have been installed to monitor the migration or levels of a pollutant or the effects and/or migration of a particular discharge.

- e. Report schedule (dates that reports will be submitted to the Regional Board).

Material Safety Data Sheets (MSDS) and additional laboratory analysis may be required by the Regional Board to evaluate the discharge and approve the DMP.

The DMP will be subject to Regional Board Executive Officer<sup>9</sup> approval. The discharge may not be initiated until the Regional Board Executive Officer approves the DMP and sends notification of this approval by letter.

- 7. Dischargers of well development water, boring waste, and clear water discharges shall provide written notice to the Regional Board before initiating any discharge to a new site. Dischargers shall certify that the new discharge site is in compliance with these General WDRs and the requirements established by Sections VII-XVI of Attachment 3 (NOI). All other dischargers covered under these General WDRs are prohibited from discharging to sites not described in their NOI or ROWD.
- 8. Discharges of liquids derived from the purging, development, or sampling of groundwater from monitoring wells shall not contain nonaqueous phase liquids (i.e., concentrations of pollutants above the solubility limits).

#### **D. APPLICATION:**

- 1. Discharges described in the Findings are eligible for coverage under these General WDRs provided that the discharger submits to the appropriate Regional Board<sup>10</sup> the following:
  - a. An NOI to comply with these General WDRs (Attachment 3 to these General WDRs) or an ROWD<sup>11</sup>.
  - b. A project map.
  - c. Evidence of compliance with CEQA, if any other public agency has required the project to comply with CEQA.
  - d. A first annual fee as described in Finding No. 6.
  - e. A DMP, as described in Provision C.6.
  - f. Any other additional information requested by the Regional Board to evaluate the discharge.

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<sup>9</sup> Regional Board Executive Officer or designee.

<sup>10</sup> Appropriate Regional Board is the Regional Board that regulates discharges of pollutants to waters of the State for the area that the proposed discharge will occur.

<sup>11</sup> If an ROWD is submitted instead of an NOI, the discharger must complete Sections VII-XV and XVII of the NOI (Attachment 3) and submit them to the Regional Board.

#### **E. STANDARD PROVISIONS:**

1. A copy of these General WDRs shall be kept at the discharge facility for reference by operating personnel. Key operating and site management personnel shall be familiar with its contents.
2. The Discharger shall develop a discharge management plan incorporating contingency measures, should sampling results show violation of water quality standards. In no case shall the discharge continue to impair beneficial uses or violate water quality standards or cause a possible nuisance condition.
3. The Discharger shall take all reasonable steps to prevent any discharge in violation of these General WDRs.
4. The Discharger shall properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) at all times to assure compliance with these General WDRs. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to assure compliance with the conditions of these General WDRs.
5. Prior to any modifications in the Discharger's facility, that would result in a material change in the quality or quantity of waste discharged or any material change in the location of the discharge, the Discharger shall report in writing to the appropriate Regional Board all pertinent information and obtain confirmation from the Regional Board that such modifications do not disqualify the Discharger from coverage under these General WDRs. Confirmation or new WDRs shall be obtained before any modifications are implemented.
6. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of these General WDRs by letter, a copy of which shall be immediately forwarded to the appropriate Regional Board office. The discharger shall also submit a Notice of Termination (Attachment No. 4 to these General WDRs) to the appropriate Regional Board.
7. These General WDRs do not convey any property rights or exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the Discharger from liability under federal, State, or local laws, and do not create a vested right to continue to discharge wastes.
8. These General WDRs do not relieve the Discharger from the responsibility to obtain other necessary local, State, and federal permits to construct facilities necessary for compliance with these General WDRs, nor do these General WDRs prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.

9. The Discharger shall allow the Regional Board or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to do the following:
  - a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of these General WDRs,
  - b. Access and copy, at reasonable times, any records that must be kept under the conditions of these General WDRs;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under these General WDRs; and
  - d. Sample or monitor, at reasonable times, for the purposes of assuring compliance with these General WDRs or as otherwise authorized by the CWC any substances or parameters at any location.
10. After notice and opportunity for a hearing, coverage of an individual discharge under these General WDRs may be terminated or modified for cause, including but not limited to, the following:
  - a. Violation of any term or condition of these General WDRs;
  - b. In obtaining these General WDRs, misrepresentation or failure to disclose all relevant facts; and
  - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
11. The filing of a request by the Discharger for an Order to modify, revoke and reissue, or terminate the filing of or a notice of planned changes or anticipated noncompliance does not stay any condition of these General WDRs.
12. The Discharger shall comply with Monitoring and Reporting Program for Water Quality Order No. 2003-0003-DWQ, the approved DMP, and any revisions as prescribed thereto by the Regional Board Executive Officer.
13. Where the Discharger becomes aware that it failed to submit any relevant facts in a ROWD/NOI or submitted incorrect information in an ROWD/NOI or in any report to the Regional Board, it shall promptly submit the required facts or information.
14. The Discharger shall furnish, within a reasonable time, any information the Regional Board or SWRCB may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Discharger's coverage under these General WDRs. The Discharger shall also furnish to the Regional Board or SWRCB, upon request, copies of records required to be kept by these General WDRs.

15. The CWC provides that any person failing or refusing to furnish technical or monitoring program reports, as required under these General WDRs, or falsifying any information provided in the monitoring reports is subject to civil liability for each day of violation.
16. The Discharger shall take all necessary steps to minimize or correct any adverse impact on the environment resulting from noncompliance with these General WDRs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
17. All reports, NOI, other documents required by these General WDRs, and other information requested by the Regional Board shall be signed by a person described below or by a duly authorized representative of that person.
  - a. For a corporation: by a responsible corporate officer such as (1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; (2) any other person who performs similar policy or decision-making functions for the corporation; or (3) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor.
  - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official.
18. Any person signing a document under Provision E.17 makes the following certification, whether written or implied:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
19. The Discharger shall immediately report any noncompliance potentially endangering public health or the environment. Any information shall be provided orally to the Regional Board within 24 hours of the time the Discharger becomes aware of the occurrence. A written report shall also be submitted to the Regional Board Executive Officer within five (5) calendar days of the time the Discharger becomes aware of the occurrence. The written report shall contain (a) a description of the noncompliance and its cause; (b) the period of the noncompliance event, including dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and (c) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



20. The Discharger shall report all instances of noncompliance not reported under Provision No. E.19 at the time monitoring reports are submitted. The reports shall contain any applicable information listed in Provision No. E.19.
21. The Discharger shall give notice to the Regional Board as soon as possible of any planned alterations to the permitted facility that may change the nature or concentration of pollutants in the discharge.
22. The Discharger shall comply with all of the conditions of these General WDRs. Any noncompliance with these General WDRs constitutes a violation of the CWC and is grounds for an enforcement action.

#### CERTIFICATION

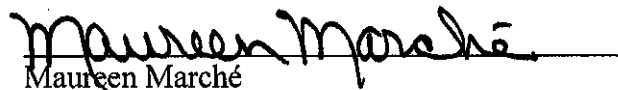
The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on April 30, 2003.

AYE: Arthur G. Baggett, Jr.  
Peter S. Silva  
Richard Katz  
Gary M. Carlton

NO: None

ABSENT: None

ABSTAIN: None

  
Maureen Marché  
Clerk to the Board

**DISCHARGE CATEGORY DEFINITIONS**

1. Well Development Discharge is any discharge of water to land during the development of a water well.
2. Monitoring Well Purge Water Discharge is any discharge of well water to land in the immediate vicinity of the monitoring well site during monitoring well sampling.
3. Boring Waste Discharge is any discharge of drilling mud and cuttings from well-drilling operations or any other borings in uncontaminated soils.
4. Water main, storage tank, and hydrant flushing discharges are discharges of potable or untreated clear water to land from water line and tank flushing operations.
5. Pipeline and Tank Hydrostatic Testing Discharges are discharges of potable or untreated clear water to land from hydrostatic testing of pipelines and tanks.
6. Commercial and Public Swimming Pool Discharges are discharges of swimming pool water to land.
7. Small Temporary Dewatering Projects are projects that discharge groundwater to land from small construction projects, excavation projects, or dewatering of underground utility vaults.
8. Small Inert Solid Waste Disposal Operations are operations or facilities, covering two acres of land or less, that accept wastes, which do not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives and do not contain significant quantities of decomposable waste.
9. Cooling Discharge is non-contact cooling water discharge, air conditioner condensate discharge, discharge from evaporators, and discharge from heat exchangers.

**INERT SOLID WASTES LIST**

1. Inert mining wastes, including native geological materials generated during aggregate mining activities at or in the vicinity of the site
2. Uncontaminated soil, inert rock, and gravel
3. Broken concrete
4. Bricks
5. Glass and ceramics not containing lead
6. Inert plastics
7. Broken asphalt paving fragments (asphalt shall not be discharged to standing water nor shall it be placed below the highest anticipated groundwater elevation)

**ATTACHMENT 3  
TO WQ ORDER  
NO. 2003-0003-DWQ**

**State of California  
State Water Resources Control Board**

**NOTICE OF INTENT  
TO COMPLY WITH THE TERMS OF WATER QUALITY ORDER NO. 2003-0003-DWQ  
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS (WDRs)  
FOR DISCHARGES TO LAND WITH A LOW THREAT TO WATER QUALITY**

|                    |   |
|--------------------|---|
| Mark Only One Item | 1. <input type="checkbox"/> New Discharge<br>2. <input type="checkbox"/> Change of Information-WDID # _____ |
|--------------------|---|

**I. Property Owner**

|                 |        |       |     |       |
|-----------------|--------|-------|-----|-------|
| Name            |        |       |     |       |
| Mailing Address |        |       |     |       |
| City            | County | State | Zip | Phone |
| Contact Person  |        |       |     |       |

**II. Facility Owner**

|                 |        |       |     |       |
|-----------------|--------|-------|-----|-------|
| Name            |        |       |     |       |
| Mailing Address |        |       |     |       |
| City            | County | State | Zip | Phone |
| Contact Person  |        |       |     |       |

**III. Billing Address**

|                 |        |       |     |       |
|-----------------|--------|-------|-----|-------|
| Name            |        |       |     |       |
| Mailing Address |        |       |     |       |
| City            | County | State | Zip | Phone |
| Contact Person  |        |       |     |       |

**STATE USE ONLY**

|                     |                              |                             |                |
|---------------------|------------------------------|-----------------------------|----------------|
| WDID:<br>□□□□□□□□□□ | Regional Board Office:<br>□□ | Date NOI Received:<br>_____ |                |
|                     |                              |                             | Check #: _____ |

IV. Site Operator

|                 |        |       |     |       |
|-----------------|--------|-------|-----|-------|
| Name            |        |       |     |       |
| Mailing Address |        |       |     |       |
| City            | County | State | Zip | Phone |
| Contact Person  |        |       |     |       |

V. Site Location

|  |                             |
|--|-----------------------------|
| Street (including address, if any)   |                             |
| Nearest Cross Street(s)  |                             |
| County:  | Total Size of Site (acres): |
| Township/Range/Section B&M T _____, R _____, Section _____,  |                             |
| Latitude/Longitude (From Center): _____ Deg. _____ Min. _____ Sec N.<br>_____ Deg. _____ Min. _____ Sec. W             |                             |
| Attach a map of at least 1:24000 (1" = 2000") showing the proposed application site (e.g., USGS 7.5" topographic map). |                             |

VI. Discharge Information

| Subject   | Notes                                      |
|---|--|
| Low Threat Discharge Category:  | See Table 1 of General Order 2003-0003-DWQ |
| Description of Operations:  |  |
| Approximate Volume of Discharge (for liquid discharges), or Flowrate:<br><input type="checkbox"/> Intermittent Discharge<br><input type="checkbox"/> Continuous Discharge | Gal/day, gal                               |
| Pollutants/Constituents Present in the Discharge and their Approximate Concentration*:  | Mg/L                                       |
| Land Use Zone:  |  |
| Adjacent Land Use Zones:  |  |

Attach additional pages to characterize the discharge if necessary.

- VII. Does the proposed discharge have the potential to adversely impact a scenic vista, substantially damage scenic resources within a state scenic highway, or substantially degrade the existing visual character/quality of the discharge site/surroundings?  
☐ YES      ☐ NO
- VIII. Would the proposed discharge conflict with existing zoning for agricultural use or a Williamson Act contract?  
☐ YES      ☐ NO
- IX. Does the proposed discharge have the potential to significantly impact an applicable air quality plan, significantly violate any air quality standard or contribute to an existing violation, result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, or significantly expose sensitive receptors to substantial pollutant concentrations?  
☐ YES      ☐ NO
- X. Do any locations within the proposed discharge site contain biologically unique or sensitive natural communities?  
☐ YES      ☐ NO
- XI. Does the discharge have the potential to cause a substantial adverse change in the significance of a historical or archeological resource (CCR Section 15064.5), directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or disturb any human remains?  
☐ YES      ☐ NO
- XII. Is the proposed discharge site located on unstable geologic units/soils or expansive soils?  
☐ YES      ☐ NO
- XIII. Is the proposed discharge site located on a hazardous materials site, as defined by Government Code Section 65962.5?  
☐ YES      ☐ NO
- XIV. Does the proposed discharge have the potential to substantially alter the existing drainage pattern of the discharge site?  
☐ YES      ☐ NO
- XV. Does the proposed discharge have the potential to significantly physically divide an established community, significantly conflict with any applicable land use plan/policy/regulation of an agency with jurisdiction over the project, or conflict with any applicable habitat/community conservation plan?  
☐ YES      ☐ NO
- XVI. California Environmental Quality Act (CEQA) (If any other public agency has required the project to comply with CEQA, dischargers must submit evidence of CEQA compliance to be eligible for coverage under these General WDRs).
- a. Name of Lead Agency: \_\_\_\_\_
- b. Has a public agency determined that the proposed project is exempt from CEQA?  
☐ YES      ☐ NO
- Basis for Exemption/Agency: \_\_\_\_\_
- c. Has a "Notice of Determination" been filed under CEQA?  
☐ YES      ☐ NO

If yes, enclose a copy of the CEQA document, Environmental Impact Report (EIR), or Negative Declaration. If no, identify the expected type of CEQA document and expected date of completion.

d. EIR Negative Declaration expected CEQA completion date: \_\_\_\_\_

e. Expected CEQA documents: \_\_\_\_\_

Please submit the following with the Notice of Intent to the appropriate Regional Water Quality Control Board:

- a. Project map
- b. Evidence of compliance with the CEQA, if any other public agency has required the project to comply with CEQA
- c. First annual fee as described in Finding No. 6
- d. A DMP, as described in Provision C.6

#### XVII. CERTIFICATION

|   |       |
|---|-------|
| <p>"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the General WDRs, including the criteria for eligibility, will be complied with."</p> |       |
| Signature of Owner/Operator   | Title |
| Printed or Typed Name   | Date  |
| Signature of Property Owner   | Title |
| Printed or Typed Name   | Date  |
| Signature of Site Operator/Manager  | Title |
| Printed or Typed Name   | Date  |

**State Water Resources Control Board**

**NOTICE OF TERMINATION  
TO COMPLY WITH THE TERMS OF WATER QUALITY ORDER NO. 2003-0003-DWQ  
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS  
FOR DISCHARGES TO LAND WITH A LOW THREAT TO WATER QUALITY**

|              |
|--------------|
| WDID # _____ |
|--------------|

**I. Property Owner**

|                 |        |       |     |       |
|-----------------|--------|-------|-----|-------|
| Name            |        |       |     |       |
| Mailing Address |        |       |     |       |
| City            | County | State | Zip | Phone |
| Contact Person  |        |       |     |       |

**II. Facility Owner**

|                 |        |       |     |       |
|-----------------|--------|-------|-----|-------|
| Name            |        |       |     |       |
| Mailing Address |        |       |     |       |
| City            | County | State | Zip | Phone |
| Contact Person  |        |       |     |       |

**III. Site Location**

|                                    |
|------------------------------------|
| Street (including address, if any) |
| Nearest Cross Street(s)            |
| County:                            |

**IV. CERTIFICATION**

|   |       |
|---|-------|
| "I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment." |       |
| Signature of Facility Owner   | Title |
| Printed or Typed Name   | Date  |
| Signature of Property Owner   | Title |
| Printed or Typed Name   | Date  |

**STATE USE ONLY**

|                     |                               |                             |                              |
|---------------------|-------------------------------|-----------------------------|------------------------------|
| WDID:<br>□□□□□□□□□□ | Regional Board Office:<br>□ □ | Date NOT Received:<br>_____ | Date NOT Processed:<br>_____ |
|---------------------|-------------------------------|-----------------------------|------------------------------|



**STATE WATER RESOURCES CONTROL BOARD**  
**MONITORING AND REPORTING PROGRAM FOR**  
**WATER QUALITY ORDER NO. 2003-0003-DWQ**  
**STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR**  
**DISCHARGES TO LAND WITH A LOW THREAT TO WATER QUALITY**

**A. MONITORING PROVISIONS:**

1. Unless otherwise approved by the appropriate Regional Water Quality Control Board (Regional Board) Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants," promulgated by the U.S. Environmental Protection Agency (USEPA).
2. If the Discharger monitors any constituent more frequently than required by the General WDRs, the monitoring results shall be submitted.
3. The Discharger shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by these General WDRs, and records of all data used to complete the application for these General WDRs. Records shall be maintained for a minimum of three years from the date of the sample, measurement, or report. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the appropriate Regional Board Executive Officer.
4. Records of monitoring information shall include the following:
  - a. The date, exact place, and time of sampling or measurements,
  - b. The individual(s) who performed the sampling or measurements,
  - c. The date(s) analyses were performed,
  - d. The individual(s) who performed the analyses,
  - e. The analytical techniques or method used, and
  - f. The results of such analyses.
5. All monitoring instruments and devices that are used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

**B. DISCHARGE MONITORING:**

1. Wells/boring waste and clear water dischargers shall submit the following information before initiation of discharge at a new site: (a) discharge site address and (b) discharge site latitude and longitude (if known).
2. Monitoring requirements for each discharge category are listed in Table 2. This monitoring program may be modified by the Regional Board Executive Officer.

**Table 2. Monitoring Requirements Specific for each Discharge Category**

| CATEGORY   | CONSTITUENTS   | FREQUENCY   |
|--|--|---|
| <b>Wells/Boring Waste</b>  |  |   |
| Water Well Development Discharge   |  |   |
| Monitoring Well Purge Water Discharge  | Constituents that the monitoring well is used to monitor                       | Consistent with the frequency of groundwater monitoring |
| Boring Waste Discharge   |  |   |
| <b>Clear Water Discharges</b>  |  |   |
| Water Main/Water Storage Tank/Water Hydrant Flushing                           | Approximate volume (gal) at each discharge location and date of each discharge | Semiannually  |
| Pipelines/Tank Hydrostatic Testing Discharge                                   | Approximate volume (gal) at each discharge location and date of each discharge | Semiannually  |
| Commercial and Public Swimming Pools   |  |   |
| <b>Small Dewatering Projects</b>   |  |   |
| Small /Temporary Dewatering Projects (such as excavations during construction) |  |   |
| <b>Miscellaneous</b>   |  |   |
| Small Inert Solid Waste Disposal Operations                                    | Approximate yd. <sup>3</sup> /day accepted by the site                         | Semiannually  |
| Evaporative Cooling Water  |  |   |

**C. REPORT SCHEDULE:**

Monitoring reports shall be submitted to the Regional Board Executive Officer in accordance with the following schedule:

| <u>Reporting Frequency</u> | <u>Report Period</u>  | <u>Report Due</u>                                 |
|----------------------------|---|---|
| Quarterly                  | January-March<br>April-June<br>July-September<br>October-December | May 15<br>August 15<br>November 15<br>February 15 |
| Semiannually               | January-June<br>July-December                                     | August 15<br>February 15                          |



Linda S. Adams  
Secretary for  
Environmental Protection

## State Water Resources Control Board

### Division of Water Quality

1001 I Street • Sacramento, California 95814 • (916) 341-5455  
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100  
FAX (916) 341-5463 • <http://www.waterboards.ca.gov>



Arnold Schwarzenegger  
Governor

---

### GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR DISCHARGES FROM UTILITY VAULTS AND UNDERGROUND STRUCTURES TO SURFACE WATERS

---

**ORDER NO. 2006-0008-DWQ**  
**NPDES NO. CAG990002**

A Discharger, as described in the following table, that has complied with the requirements for coverage under this Order is authorized to discharge under this Order, once permit coverage is effective, as described in this Order.

|                    |   |
|--------------------|---|
| <b>Dischargers</b> | <b>Utility companies with short-term intermittent discharges from utility vaults and underground structures to waters of the United States that do not cause, have the reasonable potential to cause, or contribute to an instream excursion above any applicable State or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water.</b> |
|--------------------|---|

|  |                        |
|--|------------------------|
| This Order was adopted by the State Water Board on:  | <b>July 19, 2006</b>   |
| This Order shall become effective on:  | <b>January 1, 2007</b> |
| This Order shall expire on:  | <b>July 19, 2011</b>   |
| The U.S. Environmental Protection Agency (USEPA) and the State Water Board have classified this discharge as a <b>minor</b> discharge. |                        |

IT IS HEREBY ORDERED that Order No. **2001-0011-DWQ** is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, Dischargers shall comply with the requirements in this Order.

I, Song Her, Clerk to the Board, do hereby certify the following is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board on July 19, 2006.

AYE: Tam M. Doduc  
Gerald D. Secundy  
Charles R. Hoppin  
Gary Wolff, P.E., Ph.D.

NO:

ABSENT: Arthur G. Baggett, Jr.

ABSTAIN:

---

Song Her  
Clerk to the Board

**California Environmental Protection Agency**

Recycled Paper



**STATE WATER RESOURCES CONTROL BOARD**

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## I. DISCHARGE INFORMATION

Utility companies supply resources, excluding water, necessary for day-to-day living and/or operations. This includes, but is not limited to, suppliers of natural gas, electricity, and telephone services. Utility companies with short-term intermittent discharges from utility vaults and underground structures to waters of the United States that do not cause, have the reasonable potential to cause, or contribute to an in-stream excursion above any applicable State or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water are authorized to discharge in accordance with the conditions set forth in this Order.

Due to the large number of vaults under each utility company, there is no single "facility." To avoid confusion, the term "site" will be used when referring to a vault or underground structure and the term "discharger" will be used when referring to the utility company.

## II. NOTIFICATION REQUIREMENTS

A. **General Permit Application.** To obtain coverage under this National Pollutant Discharge Elimination System (NPDES) General Permit, a Notice of Intent (NOI), a project map(s), a Pollution Prevention Plan (PLAN), and the first annual fee must be submitted to the State Water Resources Control Board (State Water Board). A Discharger must submit a separate enrollment for discharges located within each Regional Water Quality Control Board (Regional Water Board) boundary as defined in section 13200 of the California Water Code (CWC). Each enrollment will cover all discharges occurring within the boundaries of that Regional Water Board. However, only one annual fee is required for each Discharger.

The NOI must include the name, address, and telephone number of the owner or operator. The NOI must also include the name and address of the utility, the type of utility or discharges, and the receiving waterbody(s). In addition, the NOI must include a project map(s) that shows the essential features of the distribution system within the Regional Water Board boundary and maps of the corresponding surface water or storm drain to which water may be discharged for five representative sites. The NOI form may be found within this General Permit package as Attachment B. Attachment C contains guidance on completing the NOI. The PLAN must contain the information detailed in VII.C.3.e of this Order.

The General Permit Application, including the NOI, map(s), PLAN, and fee, must be submitted to the following address:

Utility Vaults NOI - NPDES Unit  
Division of Water Quality  
State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-0100

A copy of the PLAN must also be sent to the appropriate Regional Water Board(s). See the Regional Water Boards' map on page C-4 in Appendix C.

- B. **General Permit Coverage.** Permit coverage will be effective when all of the following have occurred: (1) The Discharger has submitted a complete permit application; (2) Receipt of a complete application is noticed for a minimum of 30 days and copies provided to the public for review and comment upon request; (3) The proposed PLAN has been reviewed by Regional Water Board staff; and (4) The PLAN has been approved by the Regional Water Board Executive Officer, or by the Regional Water Board after a public hearing, if requested.
- C. **Exclusion of Coverage.** The authorization to discharge under this General Permit is terminated upon receipt of a Notice of Exclusion (NOE) or if the appropriate Regional Water Board decides that the discharge would best be regulated under either an individual or another general permit. An NOE is a one-page notice that states that the Discharger is not eligible for coverage under this General Permit and provided the reason for the exclusion.
- D. **Eligibility Criteria.** To be authorized by this General Permit, Dischargers must meet the following criteria:
1. Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an excursion above any applicable federal water quality criterion established by the U.S. Environmental Protection Agency (USEPA) pursuant to Clean Water Act (CWA) section 303. Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an excursion above any water quality objective adopted by the appropriate Regional or State Water Board, including prohibitions of discharge for the receiving waters.
  2. The discharge does not cause acute or chronic toxicity in the receiving water.
- E. **Discharge to a Municipal Separate Storm Sewer System.** Whenever there is a discharge of 50,000 gallons or more to a municipal separate storm sewer system (MS4), the Discharger shall contact the appropriate local agency with jurisdiction over the MS4 within 24 hours. It is the State Water Board's intention with this requirement to encourage communication between Dischargers under this General Permit and local agencies responsible for MS4s to reduce misunderstandings and concerns over the types of discharges covered by this General Permit.
- F. **Termination of Discharges.** Dischargers shall submit a Notice of Termination or Transfer (NOTT) when coverage under this General Permit is no longer needed. An NOTT is a form that lists the Waste Discharge Identification Number (WDID), the name and address of the owner of the utility, and is signed and dated by the owner certifying that the Dischargers associated with Permit No. CAG990002 have been eliminated or that there has been a change in ownership. Upon submission, the Discharger is no longer authorized to discharge wastewater associated with this General Permit.

**G. Changes from Authorization Under General Permit to Individual Permit.**

Dischargers already covered under the NPDES program, whether by general or individual permit, may elect to continue coverage under the existing permit or may submit a complete application for coverage under this General Permit. Dischargers who submit a complete application under this General Permit are not required to submit an individual permit application. The Regional Water Board may request additional information and determine that a Discharger is not eligible for coverage under this General Permit and would be better regulated under an individual or other general NPDES permit or, for discharges to land, under waste discharge requirements (WDRs). If a Regional Water Board issues an NPDES permit or WDRs, the applicability of this General Permit to the specified discharge is immediately terminated on the effective date of the NPDES permit or WDRs.

**H. Transferring Ownership.** In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger must notify the succeeding owner or operator of the existence of this General Permit by letter, a copy of which must be immediately forwarded to the Regional Water Board office. The Discharger must submit an NOTT to the Regional Water Board and a copy of the NOTT to the State Water Board. The succeeding owner or operator must then submit a new general permit application.

### **III. FINDINGS**

The State Water Board finds:

**A. Background.** This Order replaces Order No. 2001-0011-DWQ. The NPDES No. CAG990002 remains the same. Utility companies with utility vaults and underground structures enrolled under previous Order No. 2001-0011-DWQ must obtain coverage under this new Order to continue their authorization to discharge. To obtain authorization for continued and future discharge to waters of the United States, Dischargers must submit a complete application, as described in II. A. above, and obtain coverage in order to be regulated under this General Permit as provided in 40 Code of Federal Regulations (CFR) section 122.28 (b)(2).

**B. Discharge Description.** Utility companies operate and maintain numerous vaults and underground structures within their service territories. These vaults and structures may be located in residential, agricultural, commercial, or industrial areas. Sizes can vary from 15 cubic feet to 1,500 cubic feet, depending on their intended use, type, or contents. For safety reasons, utility companies must de-water vaults and underground structures prior to performing any repair, maintenance, and/or installation of equipment. When the amount of water in the vaults or structures interferes with the safety and quality of the work to be done, water must be pumped out. Volume of discharges can vary from a few gallons to a few thousand gallons depending on the configuration and individual situation at each vault or structure. These intermittent discharges are routed to waters of the United States directly or indirectly via local storm conveyance systems.

- C. **Legal Authorities.** This Order is issued pursuant to section 402 of the CWA and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the CWC. It shall serve as an NPDES permit for point source discharges from utility vaults and underground structures to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4 of the CWC.

States may request authority to issue general NPDES permits pursuant to 40 CFR section 122.28. On June 8, 1989, the State Water Board submitted an application to the USEPA requesting revisions to its NPDES Program in accordance with 40 CFR 122.28, 123.62, and 403.10. The application included a request to add general permit authority to its approved NPDES Program. On September 22, 1989, the USEPA, Region 9, approved the State Water Board's request and granted authorization for the State to issue general NPDES permits.

- D. **Background and Rationale for Requirements.** The State Water Board developed the requirements in this Order based on information submitted as part of the applications for several like agencies, through monitoring and reporting programs, and through special studies. Attachments A through F, which contain background information and rationale for Order requirements, are hereby incorporated into this Order and constitute part of the Findings for this Order.
- E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of CEQA (Public Resources Code section 21100, et seq.) in accordance with section 13389 of the CWC.
- F. **Technology-based Effluent Limitations (TBELs).** Title 40 of the CFR section 122.44(a) requires that permits include applicable **TBELs** and standards. This Order does not include numeric-**TBELs** because USEPA has not promulgated effluent limitation guidelines for utility vaults. Instead, this Order requires Pollution Prevention Practices (PPPs), which are equivalent to Best Management Practices (BMPs), in Pollution Prevention Plans (PLANS) to control and abate the discharge of pollutants to surface waters and to achieve Best Available Technology Economically Achievable (BAT)/Best Conventional Pollutant Control Technology (BCT) requirements and comply with applicable water quality standards.
- G. **Water Quality-based Effluent Limitations (WQBELs).** Section 122.44(d) of 40 CFR requires that permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality criteria have not been established, 40 CFR section 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter. Section 122.44(k)(3) of 40 CFR allows the use of BMPs to control or abate the discharge of pollutants when numeric effluent limitations are infeasible or when practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. As discussed in detail in the Fact Sheet, it is not feasible to establish WQBELs for pollutants in discharges from utility vaults or



underground structures. Therefore, in lieu of WQBELs, this Order requires Dischargers to establish PPPs in PLANS for discharges from utility vaults and underground structures.

- H. **Water Quality Control Plans.** The Regional Water Boards have adopted Water Quality Control Plans (hereinafter Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives for all waters addressed through the plans. In addition, State Water Board Resolution No. 88-63 establishes state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal and domestic supplies. Requirements of this Order specifically implement the applicable Basin Plans.
- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
- J. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their Basin Plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for and calculating WQBELs and requires Dischargers to submit data sufficient to do so. As described in the Fact Sheet, Water Quality Order No. 2001-11-DWQ granted exceptions from sections 1.3 (Determination of Priority Pollutants Requiring WQBELs) and 1.4 (Calculations of Effluent Limitations) of the SIP because numeric effluent limitations are infeasible for discharges from utility vaults and underground structures. This Order continues the exceptions granted from sections 1.3 and 1.4 of the SIP.
- K. **Compliance Schedules and Interim Requirements. (Not applicable)**
- L. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Boards' Basin Plans implement, and incorporate by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation

provision of 40 CFR section 131.12 and State Water Board Resolution No. 68-16.

- M. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations of 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.
- N. **Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.
- O. **Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR sections 122.41 and 122.42 apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The State Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).
- P. **Notification of Interested Parties.** The State Water Board has notified the Dischargers and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- Q. **Consideration of Public Comment.** The State Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.
- R. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 CFR section 131.21, 65 FR 24641, April 27, 2000). Under the revised regulation (also known as the Alaska rule), USEPA must approve new and revised standards submitted to USEPA after May 30, 2000 before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- S. **Stringency of Requirements for Individual Pollutants.** This Order contains restrictions that are no more stringent than required by CWA. Restrictions consist of TBELs and WQBELs. The TBELs consist of PPPs as indicated in a PLAN. The permit's technology-based pollutant restrictions are no more stringent than required by the CWA. The narrative WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water

quality objectives have been approved pursuant to federal law and are the applicable federal WQS. Collectively, this Order's restrictions are no more stringent than required to implement the technology-based requirements of the CWA and the applicable WQS for purposes of the CWA.

#### **IV. DISCHARGE PROHIBITIONS**

- A. The discharge of wastewater at a location or in a manner different from that described in the Findings is prohibited.
- B. The discharge of wastewater shall not create or cause conditions of nuisance or pollution.
- C. The discharge shall not cause, have a reasonable potential to cause, or contribute to an in-stream excursion above any applicable criterion promulgated by USEPA pursuant to section 303 of the CWA, or water quality objective adopted by the State or Regional Water Boards.

#### **V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

- A. Effluent Limitations (Not Applicable)**
- B. Land Discharge Specifications (Not Applicable)**
- C. Reclamation Specifications (Not Applicable)**

#### **VI. RECEIVING WATER LIMITATIONS**

##### **A. Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Basin Plans and are a required part of this Order. The discharge shall not cause the following in the surface receiving water:

1. Concentrations of dissolved oxygen (DO) in the receiving waters to fall below 7.0 milligrams (mg/L). During any period when the receiving water DO concentration is already below 7.0 mg/L, the discharge shall not cause any further depression of the DO content.
2. Oils, greases, waxes, floating material (liquids, solids, foams, and scum), or suspended material to create a nuisance or adversely affect beneficial uses.
3. Alteration of the apparent color, taste, or odor beyond present natural background levels.

4. Biostimulatory substances to be present in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
5. Turbidity in amounts that adversely affect beneficial uses in the receiving waters. Turbidity shall not increase more than 20 percent over background levels.
6. The ambient pH to fall below 6.5 or exceed 9.0.
7. Deposition of material that causes a nuisance or adversely affects beneficial uses.
8. Significant erosion or alteration of the watercourse.
9. The ambient receiving water temperature to be altered more than 5<sup>0</sup> F.
10. Total residual chlorine to be present at concentrations that are detectable using approved methods as specified in 40 CFR section 136.
11. Taste or odor-producing substances that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or cause nuisance or adversely affect beneficial uses.
12. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations (CCR), Title 22, that harm human, plant, animal, or aquatic life, or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
13. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses, that produce a detrimental response in human, plant, animal, or aquatic life, or that bioaccumulate in aquatic resources at levels harmful to human health.
14. Violation of any applicable water quality objective for receiving waters adopted by the State or applicable Regional Water Board or applicable water quality criterion adopted by USEPA pursuant to section 303 of the CWA.

These limitations apply unless more stringent provisions exist in either the Basin Plan or an applicable State plan. The more stringent limitation shall apply.

**B. Groundwater Limitations (Not Applicable)**

## VII. PROVISIONS

### A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. **State Water Board Standard Provisions.** The Discharger shall comply with the following provisions:

For the Regional Water Board to receive immediate and accurate information regarding all points of discharge, the Discharger shall establish and maintain a liaison contact with the appropriate Regional Water Board. The Discharger must send the Regional Water Board(s) a list of designated liaison personnel, telephone number(s), and specific area(s) of responsibility within 30 days from the date of submittal of the NOI and after any update to the list.

A copy of this General Permit and the PLAN shall be kept where key operating personnel can refer to the documents. Key operating and site management personnel shall be familiar with its contents.

The Discharger is required to retain records, including all monitoring information and copies of all reports required by this General Permit, for five years unless directed otherwise by a Regional Water Board.

This General Permit expires on **July 19, 2011**. Those enrollees who are covered under this General Permit at the time of expiration will continue to be covered under this General Permit until permit coverage becomes effective under the reissued General Permit unless an NOTT has been submitted to terminate coverage. Re-enrollees must complete, submit, and have their PLAN approved by a Regional Water Board Executive Officer or adopted by a Regional Water Boards if a hearing is requested, by the effective date to maintain coverage after January 1, 2007.

### B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

### C. Special Provisions

1. **Reopener Provisions (Not Applicable)**
2. **Special Studies, Technical Reports and Additional Monitoring Requirements (Not Applicable)**

### **3. Best Management Practices and Pollution Prevention Plan (PLAN)**

- a. Similar to BMPs, PPPs are designed to prevent or control the discharge of pollutants. They may include a schedule of activities, prohibition of practices, maintenance procedures, or other management practices. A PLAN is a written document that describes the operator's activities to comply with the requirements in the General Permit. The PLAN is intended to evaluate potential pollutant sources at the site and select and implement appropriate measures designed to prevent or control the discharge of pollutants.
- b. Standard industrywide PPPs have not been developed for utility companies. The Discharger shall prepare a PLAN and implement it whenever there is a discharge. If standard industrywide PPPs are developed, then the Discharger may utilize those PPPs or develop a PLAN utilizing selected standard industrywide PPPs, as appropriate. All PLANs developed by utility companies must meet the minimum specifications as described below.
- c. If an exceedance(s) of a receiving water limitation defined in "Section V. Receiving Water Limitations," expressed as either narrative or numerical, has been identified by the Discharger or by the Regional Water Board as a result of a utility company discharge, either of the following actions shall be undertaken to ensure compliance with this General Permit:
  - i. The Discharger shall submit a new PLAN, which demonstrates to the satisfaction of the Regional Water Board that the Discharger is fully in compliance with "VII.3. Pollution Prevention Practices & Pollution Prevention Plan" above and implementation of the new PLAN will prevent future exceedance(s) of the receiving water limits; or
  - ii. The Discharger shall develop and submit a revised PLAN to Regional Water Board, with new or revised PPPs, to prevent future exceedance(s). The Discharger shall implement such PPPs and document the progress of implementation and effectiveness thereof in the Annual Report to the Regional Water Board Executive Officer.
- d. Dischargers who are enrolling for the first time under this General Permit must submit the PLAN together with the NOI, map, and annual fee, as described in II.A. (Notification Requirements) above, to the State Water Board. Re-enrollees shall submit a copy of their previous PLAN, or if new information warrants, shall submit a revised or new PLAN as part of their application for coverage under this General Permit. The Discharger must indicate in the NOI the location where the PLAN is to be maintained and identify the appropriate contact person, with telephone number, for the PLAN. The Discharger must revise the PLAN as requested by the Regional Water Board.

- e. The PLAN shall include, to the extent possible, at least the following items:
- i. Provisions for Scheduled Discharges, Unscheduled Discharges, Reservoir Discharges (if any), and Emergency Operation Discharges.
  - ii. **Pollution Prevention Team.** Each PLAN shall identify a specific individual or individuals within the utility's organization as members of a Pollution Prevention Team that are responsible for developing the PLAN and assisting the utility or plant manager in its implementation, maintenance, and revision. The PLAN shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the utility's PLAN.
  - iii. **Description of Potential Pollutant Sources.** Each PLAN shall provide a description of potential sources that may add significant amounts of pollutants to discharges. Each PLAN shall identify all activities and significant materials that may potentially be significant pollutant sources. Each PLAN shall include at a minimum:
    - a) **Drainage map.** Provide a map showing the essential features of the distribution system for the service area within a specific Regional Water Board boundary and showing the corresponding surface waters to which water may be discharged.
    - b) **Inventory of Exposed Materials.** Include an inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water from 3 years prior to the submission of the NOI for coverage under this General Permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff from 3 years prior to the submission of the NOI for coverage under this General Permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.
    - c) **Spills and Leaks.** Include a list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas exposed to precipitation or that otherwise enter the discharge stream from 3 years prior to the date of the submission of NOI to be covered under this General Permit. The list shall be updated as appropriate during the term of this General Permit.

d) **Risk Identification and Summary of Potential Pollutant Sources.**

Include a narrative description of the potential pollutant sources, such as from significant dust or particulate generating processes. The description shall specifically list any significant potential source of pollutants at the site and, for each potential source; any pollutant or pollutant parameter (for example, oil and grease, etc.) of concern shall be identified.

iv. **Measures and Controls.** Each discharger covered by this General Permit shall develop a description of PPPs appropriate for the site(s), and implement such controls. The appropriateness and priorities of PPPs in a PLAN must reflect identified potential sources of pollutants at the site. Also, the Discharger should discuss the advantages and limitations of the PPP. If relevant, include a structural diagram. The description of wastewater management controls shall address the following minimum components, including a schedule for implementing such controls:

- a) **Good Housekeeping.** Maintain areas that may contribute pollutants to discharges so that they are kept clean and orderly. Store and contain liquid materials in such a manner that if the container is ruptured, the contents will not discharge, flow, or be washed into the storm drainage system, surface waters, or groundwater.
- b) **Preventive Maintenance.** Inspect and maintain wastewater management devices as well as inspect and test site equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensure appropriate maintenance of such equipment and systems.
- c) **Spill Prevention and Response Procedures.** Identify areas where potential spills, which can contribute pollutants to discharge, can occur and their accompanying drainage points. Specify material handling procedures, storage requirements, and use of equipment. Make accessible to the appropriate personnel the procedures for cleaning up spills identified in the PLAN. Make accessible the necessary equipment to implement a clean up. Note that if the spilled material is hazardous, then the cleanup materials used are also hazardous and should be disposed of properly. For large spills, a private spill cleanup company or Hazmat may be necessary.
- d) **Inspections.** Identify qualified personnel, by name or by job title, to inspect designated equipment and areas of the site, and ensure that appropriate actions are taken in response to the inspections. Maintain records of inspections. Inventory and inspect each discharge point during dry weather.
- e) **Employee Training.** Train employees to implement activities identified in the PLAN. Address topics such as spill response, good housekeeping,



and material management practices. Identify how often training will take place.

- f) **Record Keeping and Internal Reporting Procedures.** Federal regulation requires that any oil spill into a water body be reported to the National Response Center at (800) 424-8802 (24 hours). The Discharger shall report spills to the appropriate local agency, such as the fire department, to assist in cleanup. Provide a description of incidents (such as spills or other discharges), along with other information describing the quality and quantity of discharges. Document patterns in time of occurrence, mode of dumping, responsible parties, date and time of incident, weather conditions, duration and cause of spill/leak/discharge, response procedures, resulting environmental problems and persons notified. Document inspections and maintenance activities and maintain records of such activities. Include the date and time the inspection was performed, the name of the inspector, and the items inspected. If problems are noted, include the corrective action required and the date the action was taken.
  - g) **Sediment and Erosion Control.** Identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.
  - h) **Management of Runoff.** Include a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage runoff in a manner that reduces pollutants in discharges from the site. The PLAN shall provide measures that the Discharger determines to be reasonable and appropriate measures.
- v. **Comprehensive Site Compliance Evaluation.** Qualified personnel shall conduct site compliance evaluations upon each discharge event. Such evaluations shall provide:
- a) The Discharger shall visually inspect for evidence of, or the potential for, pollutants entering the receiving water(s). Evaluate measures to reduce pollutant loadings to determine whether they are adequate and properly implemented in accordance with the terms of this General Permit or whether additional control measures are needed. Ensure that structural wastewater management measures, sediment and erosion control measures, and other structural PPPs identified in the PLAN are operating correctly. Perform a visual inspection of equipment needed to implement the PLAN, such as spill response equipment.

- b) Based on the results of the evaluation, the Discharger shall revise, as appropriate, the description of potential pollutant sources identified in the PLAN in accordance with Item iii of this section (Description of Potential Pollutant Sources) and PPPs identified in the PLAN with Item iv of this section (Measures and Controls) within two weeks of such evaluation and shall provide timely implementation of any changes to the PLAN.
  - c) Write and retain for 3 years, a report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the PLAN, and actions taken in accordance with Item iv.b, above. Identify any incidents of noncompliance or certify that the site(s) is in compliance with the PLAN and this General Permit. The report shall be signed in accordance with signatory requirements of this General Permit.
- f. Additional Requirements include:
- i. The PLAN shall be designed to comply with BAT/BCT and to ensure compliance with WQS.
  - ii. The Discharger shall amend the PLAN whenever there is a change in construction, operation, or maintenance, when such amendment is necessary to ensure compliance with BAT/BCT and receiving water limits. The PLAN shall also be amended if it is in violation of any conditions of this General Permit or has not achieved the general objective of controlling pollutants in discharges to surface waters. The Discharger shall submit the amended PLAN to the Regional Water Board.
  - iii. The PLAN and any amendments thereto shall be certified in accordance with the signatory requirements of Standard Provision B.2.

**4. Compliance Schedules (Not Applicable)**

**5. Construction, Operation and Maintenance Specifications (Not Applicable)**

**6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)**

**7. Other Special Provisions**

- a. Following adoption of this General Permit, Regional Water Boards shall review monitoring reports, review revisions to Discharges PLANs, conduct compliance inspections, and take enforcement actions.
- b. The Dischargers shall dispose of solids removed from liquid wastes in a manner that is consistent with Title 27, of the CCR and approved by the appropriate Regional Water Board's Executive Office.

**VIII. COMPLIANCE DETERMINATION (NOT APPLICABLE)**

## ATTACHMENT A – DEFINITIONS

**Notice of Exclusion (NOE):** A one-page notice that indicates that the proposed Discharger is NOT eligible for coverage under this General Permit and states the reason behind the decision.

**Notice of Intent (NOI):** A form completed and signed by an industrial utility owner/operator notifying the State and Regional Water Boards that the operator will comply with the General Permit for an industrial activity at a specific utility or site.

**Notice of Termination or Transfer (NOTT):** A form completed and signed by a utility operator notifying the State and Regional Water Boards that the owner/operator no longer wishes to operate under the General Permit. Submission of an NOTT constitutes notice that the owner (and his/her agent) of the utility identified on the form is no longer authorized to discharge wastewater associated with utility company maintenance activities under this General Permit.

**Pollution Prevention Plan (PLAN):** A written document that describes the operator's activities to comply with the requirements in this General Permit. The PLAN is intended to facilitate a process whereby the operator evaluates potential pollutant sources at the site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants, such as PPPs.

**Pollution Prevention Practices (PPP):** Similar to Best Management Practices (BMP), PPPs are permit conditions used in place of or in conjunction with effluent limitations to prevent or control the discharge of pollutants. These may include a schedule of activities, prohibition of practices, maintenance procedures, or other management practices. PPPs may include, but are not limited to, employee training, treatment requirements, operating procedures, or practices to control plant site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage.

**Utility Company:** Any person, as defined in section 13050 of the California Water Code, whose business is to supply the resources, excluding water, necessary for day to day living and/or operations. This includes, but is not limited to, suppliers of natural gas, electricity, and telephone services.

**ATTACHMENT B – NOTICE OF INTENT FORM**

**NOTICE OF INTENT (NOI)**  
**WATER QUALITY ORDER NO. 2006-0008-DWQ**  
**STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**PERMIT FOR DISCHARGES FROM UTILITY VAULTS AND UNDERGROUND STRUCTURES TO**  
**SURFACE WATERS OF THE UNITED STATES**  
**GENERAL PERMIT NO. CAG990002**

**I. NOTICE OF INTENT STATUS (See Instructions)**

|                    |  |
|--------------------|--|
| MARK ONLY ONE ITEM | 1. <input type="checkbox"/> New Discharger    2. <input type="checkbox"/> Change of Information – WDID # |
|--------------------|--|

**II. OWNER/OPERATOR** *(If additional owners/operators are involved, provide the information in a supplemental page.)*

|                    |           |   |             |
|--------------------|-----------|---|-------------|
| A. Name            |           | Owner/Operator Type (Check One)<br>1. <input type="checkbox"/> City    2. <input type="checkbox"/> County    3. <input type="checkbox"/> State<br>4. <input type="checkbox"/> Gov. Combo    5. <input type="checkbox"/> Private |             |
| B. Mailing Address |           |   |             |
| C. City            | D. County | E. State  | F. Zip Code |
| G. Contact Person  | H. Title  | I. Phone  |             |

☐ **ADDITIONAL OWNERS** \_\_\_\_\_

**III. BILLING ADDRESS** *(Enter information only if different from above)*

|  |                    |          |             |
|--|--------------------|----------|-------------|
| <b>Send to:</b><br><input type="checkbox"/> Owner/Operator<br><input type="checkbox"/> Other | A. Name            | B. Title |             |
|  | C. Mailing Address |          |             |
| D. City  | E. County          | F. State | G. Zip Code |

**IV. RECEIVING WATER INFORMATION**

|  |   |
|--|---|
| A. Receiving water(s):   | B. Describe the types of receiving waters affected: |
| C. Regional Water Quality Control Board(s) where discharge sites are located<br>List all regions where discharge of wastewater is proposed, i.e. Region(s) 1, 2, 3, 4, 5, 6, 7, 8, and/or 9: |   |

**V. LAND DISPOSAL/RECLAMATION**

|   |  |
|---|--|
| The State Water Resources Control Board's water rights authority encourages the disposal of wastewater on land or re-use of wastewater where practical. You must evaluate and rule out this alternative prior to any discharge to surface water under this Order. |  |
| Is land disposal/reclamation feasible? <input type="checkbox"/> Yes <input type="checkbox"/> No   |  |
| If <b>Yes</b> , you should contact the Regional Water Board. This Order does not apply if there is no discharge to surface waters. If <b>No</b> , explain:  |  |

**VI. VERIFICATION**

|  |
|--|
| Have you contacted the appropriate Regional Water Board or verified in the appropriate Basin Plan that the proposed discharge will not violate prohibitions or orders of that Regional Water Board? <input type="checkbox"/> Yes <input type="checkbox"/> No |
|--|

## VII. TYPE (Check All That Apply)

|                                   |                                      |                                    |                                 |
|-----------------------------------|--------------------------------------|------------------------------------|---------------------------------|
| <input type="checkbox"/> Electric | <input type="checkbox"/> Natural Gas | <input type="checkbox"/> Telephone | <input type="checkbox"/> Other: |
|-----------------------------------|--------------------------------------|------------------------------------|---------------------------------|

## VIII. POLLUTION PREVENTION PRACTICES PLAN INFORMATION

|   |           |                |                            |          |
|---|-----------|----------------|----------------------------|----------|
| A. Company Name                         |           |                | B. Contact Person          |          |
| C. Street Address Where PLAN is Located |           |                | D. Title of Contact Person |          |
| E. City                                 | F. County | G. State<br>CA | H. Zip Code                | I. Phone |

## IX. DESCRIPTION OF DISCHARGE

|   |
|---|
| Describe the discharge(s) proposed. List any potential pollutants in the discharge. Attach additional sheets if needed. |
|---|

## X. VICINITY MAP AND FEE

|   |                              |  |
|---|------------------------------|--|
| A. Have you included vicinity map(s) with this submittal?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No                              |
| Separate vicinity maps must be submitted for each Region where a proposed discharge will occur.     |                              |  |
| B. Have you included payment of the filing fee (for first-time enrollees only) with this submittal? | <input type="checkbox"/> Yes | <input type="checkbox"/> No <input type="checkbox"/> N/A |
| C. Have you included your PLAN?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No                              |

## XI. CERTIFICATION

|   |          |
|---|----------|
| <p>"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the criteria for eligibility and the development and implementation of Pollution Prevention Practices, if required, will be complied with."</p> |          |
| A. Printed Name:  |          |
| B. Signature:   | C. Date: |
| D. Title:   |          |

**PLEASE SUBMIT THE NOI, FIRST ANNUAL FEE, PLAN AND MAP TO THE FOLLOWING ADDRESS:**

**UTILITIES NOI**  
**NPDES UNIT**  
**DIVISION OF WATER QUALITY**  
**STATE WATER RESOURCES CONTROL BOARD**  
**P.O. BOX 100**  
**SACRAMENTO, CA 95812-0100**

## STATE USE ONLY

|       |                       |                            |                     |
|-------|-----------------------|----------------------------|---------------------|
| WDID: | Regional Board Office | Date NOI Received:         | Date NOI Processed: |
|       |                       | Fee Amount Received:<br>\$ | Check #:            |

## **ATTACHMENT C – INSTRUCTIONS FOR COMPLETING THE NOI**

### **WATER QUALITY ORDER NO. 2006-0008-DWQ STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR DISCHARGES FROM UTILITY VAULTS & UNDERGROUND STRUCTURES TO SURFACE WATERS OF THE UNITED STATES GENERAL PERMIT NO. CAG990002**

These instructions are intended to help you, the Discharger, complete the NOI form for General Permit No. CAG990002. **Please print clearly or type when completing the NOI form and vicinity map(s). Illegible applications will not be processed.** For any field, if more space is needed, submit a supplementary letter with the NOI.

Send the completed and signed form, filing fee, PLAN, supporting documentation, and vicinity map(s) to the State Water Resources Control Board (State Water Board). Submit one permit application to cover all discharges within the boundaries of a Regional Water Quality Control Board (Regional Water Board). If the proposed discharges occur in more than one Region, submit a permit application for each Region where a discharge will occur. Only one annual fee is required.

#### **Section I – Notice of Intent Status**

Indicate whether this request is for first time coverage or a change of information for a utility already covered under this General Permit. For a change of information, enter the eleven-digit Waste Discharge Identification (WDID) number for the utility.

#### **Section II – Owner/Operator**

- A. Name** – Enter the name of the owner/operator. Check the appropriate box for which type of agency best describes the owner/operator. "Gov. Combo." is an abbreviation for "Government Combination" for a joint powers agency created by two or more government agencies. Private businesses should check the "Private" box.
- B. Mailing Address** – Enter the street number and name where correspondence should be sent (P.O. Box is acceptable).
- C. City** – Enter the city that applies to the mailing address given.
- D. County** – Enter the county that applies to the mailing address given.
- E. State** – Enter the state that applies to the mailing address given.
- F. Zip Code** – Enter the zip code that applies to the mailing address given.
- G. Contact Person** – Enter the name (first and last) of the contact person.
- H. Title** – Enter the contact person's title.
- I. Telephone** – Enter the daytime telephone number of the contact person.

**Additional Owners** - Please check this box if there is more than one owner/operator and list.

### **Section III – Billing Address**

**Send To:** - Check the appropriate box and enter the information **only** if it is different from section II. above.

- A. Name** – Enter the name (first and last) of the person who will be responsible for the billing.
- B. Title** – Enter the title of the person responsible for the billing.
- C. Mailing Address** – Enter the street number and name where the billing should be sent  
(P.O. Box is acceptable).
- D. City** – Enter the city that applies to the billing address.
- E. County** – Enter the county that applies to the billing address.
- F. State** – Enter the state that applies to the billing address.
- G. Zip Code** – Enter the zip code that applies to the billing address.

### **Section IV – Receiving Water Information**

- A. Enter the names(s) of the waterbody to which the wastewater is discharged.
- B. Describe the type(s) of receiving waters affected (river, lake, creek, stream, bay, ocean, wetland).
- C. List all Region numbers where discharge is proposed. Regional Water Board boundaries are defined in section 13200 of the California Water Code. Each Region number is given below and a map is attached to these instructions. For coverage in Region 5, send two additional copies of the map and for coverage in Region 6, send one additional copy.

|                          |  |  |
|--------------------------|--|--|
| 1 - North Coast          | 2 - San Francisco Bay                            | 3 - Central Coast                            |
| 4 - Los Angeles          | 5 - Central Valley (Sacramento, Fresno, Redding) | 6 - Lahontan (South Lake Tahoe, Victorville) |
| 7 - Colorado River Basin | 8 - Santa Ana                                    | 9 - San Diego                                |

### **Section V - Land Disposal/Reclamation**

Check “YES” if land disposal and/or reclamation is/are feasible. If you check “YES,” contact the appropriate Regional Water Board. Your discharge may not be covered under the NPDES Program. If you checked “NO,” explain in the space provided the reason why these alternatives are not feasible.

### **Section VI – Verification**

Indicate by checking “YES” or “NO” whether verification has been done to determine if the discharge(s) are in compliance with prohibitions or orders of the Regional Water Board.



### **Section VII - Type**

Check the appropriate box(s) to indicate the type of utility for which you are seeking coverage.

### **Section VIII - Pollution Prevention Plan (PLAN) Information**

- A. **Company Name** – Enter the legal name of the company applying for coverage.
- B. **Contact Person** – List the company contact person responsible for preparation and implementation of the PLAN.
- C. **Street Address Where the PLAN is Located** - Indicate the street number and name where you will keep the PLAN for reference and review by personnel.
- D. **Title of Contact Person** – Enter the official company title of the contact person.
- E. **City** – Enter the city where the PLAN will be kept.
- F. **County** – Enter the county where the PLAN will be kept.
- G. **State** – Enter the state where the PLAN will be kept.
- H. **Zip Code** – Enter the city zip code where the PLAN will be kept.
- I. **Telephone** – Enter the daytime telephone number of the contact person.

### **Section IX- Description of Discharge**

Describe the types of operations that occur and potential pollutants that may be found in the discharge.

### **Section X – Vicinity Map and Fee**

- A. If you have included vicinity map(s) with your NOI submittal, check the “YES” box. If not included, check “NO.” **NOTE: Vicinity map(s) of the proposed discharge site must be received before you can obtain coverage under this General Permit.** Submit separate vicinity map(s) for each Regional Water Board where a discharge is proposed. If applying for coverage in the Central Valley Region, send two additional copies of the required map and if applying for coverage under Lahontan Region, send one additional copy of the required map.

The map must show the essential features of the distribution system for the service area within a specific Regional Water Board boundary and show the corresponding surface waters to which water may be discharged.

- B. Check “YES” if you have included the annual fee with your submittal. Check “NO” if you have not included payment. **NOTE: Payment of this fee must be received before you can obtain coverage under this General Permit.** You will be invoiced annually and payment is required to continue coverage.
- C. Check “YES” if you have included the PLAN. Otherwise, check “NO.” **NOTE: You must submit the PLAN to the State Water Board and appropriate Regional Water Board(s) to obtain coverage under this General Permit.**

**Section XI - Certification**

- A. Printed Name** – Print your name legibly. The person responsible according to the Signatory Requirements section of the Standard Provisions (Attachment D) must fill out this section.
- B. Signature** – Provide a signature of name printed above.
- C. Date** – Indicate the date signed.
- D. Title** – Include the professional title of the person signing the NOI.

GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT  
FOR DISCHARGES FROM UTILITY VAULTS AND UNDERGROUND STRUCTURES TO SURFACE WATERS  
ORDER NO. 2006-0008-DWQ  
NPDES NO. CAG990002

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

### NORTH COAST REGION (1)

5550 Skylane Blvd, Ste. A  
Santa Rose, CA 95403  
(707) 576-2220 FAX: (707) 523-0135  
Web Page:

<http://www.waterboards.ca.gov/northcoast>

### CENTRAL COAST REGION (3)

895 Aerovista Place, Ste 101  
San Luis Obispo, CA 93401  
(805) 549-3147 FAX: (805) 543-0397  
Web Page:

<http://www.waterboards.ca.gov/centralcoast>

### LAHONTAN REGION (6 SLT)

2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA 96150  
(530) 542-5400 FAX: (530) 544-2271  
Web Page:

<http://www.waterboards.ca.gov/lahontan>

### SAN FRANCISCO BAY REGION (2)

1515 Clay Street, Ste. 1400  
Oakland, CA 94612  
(510) 622-2300 FAX: (510) 622-2460  
Web Page:

<http://www.waterboards.ca.gov/sanfranciscobay>

### LOS ANGELES REGION (4)

320 W. 4<sup>th</sup> Street, Ste. 200  
Los Angeles, CA 90013  
(213) 576-6600 FAX: (213) 576-6640  
Web Page:

<http://www.waterboards.ca.gov/losangeles>

### VICTORVILLE OFFICE (6V)

14440 Civic Drive, Suite 200  
Victorville, CA 92392  
(760) 241-6583 FAX: (760) 241-7308  
Web Page:

<http://www.waterboards.ca.gov/lahontan>

### CENTRAL VALLEY REGION (5S)

11020 Sun Center Dr., #200  
Rancho Cordova, CA 95670-6114  
(916) 464-3291 FAX: (916) 464-4645  
Web Page:

<http://www.waterboards.ca.gov/centralvalley>

### COLORADO RIVER BASIN REGION (7)

73-720 Fred Waring Dr., Ste. 100  
Palm Desert, CA 92260  
(760) 346-7491 FAX: (760) 341-6820  
Web Page:

<http://www.waterboards.ca.gov/coloradoriver>

### FRESNO BRANCH OFFICE (5F)

1685 E St.  
Fresno, CA 93706  
(559) 445-5116 FAX: (559) 445-5910  
Web Page:

<http://www.waterboards.ca.gov/centralvalley>

### SANTA ANA REGION (8)

California Tower  
3737 Main Street, Ste. 500  
Riverside, CA 92501-3339  
(951) 782-4130 FAX : (951) 781-6288  
Web Page:

<http://www.waterboards.ca.gov/santaana>

### REDDING BRANCH OFFICE (5R)

415 Knollcrest Drive, Ste. 100  
Redding, CA 96002  
(530) 224-4845 FAX: (530) 224-4857  
Web Page:

<http://www.waterboards.ca.gov/centralvalley>

### SAN DIEGO REGION (9)

9174 Sky Park Court, Ste. 100  
San Diego, CA 92123-4340  
(858) 467-2952 FAX: (858) 571-6972  
Web Page:

<http://www.waterboards.ca.gov/sandiego>

### STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

### CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

Linda S. Adams, Agency Secretary

### STATE WATER RESOURCES CONTROL BOARD

Tam M. Doduc, Board Chair



## **ATTACHMENT D – STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [40 CFR §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not been modified to incorporate the requirement [40 CFR §122.41(a)(1)].

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [40 CFR §122.41(c)].

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR §122.41(d)].

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [40 CFR §122.41(e)].

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 CFR §122.41(g)].

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [40 CFR §122.5(c)].

## **F. Inspection and Entry**

The Discharger shall allow the Regional Water Quality Control Board (Regional Water Board), State Water Resources Control Board (State Water Board), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383(c)]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [40 CFR §122.41(m)(2)].

3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below [40 CFR §122.41(m)(3)(ii)].

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR §122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph H.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset,

and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR §122.41(n)(2)].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR §122.41(n)(3)]:
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
  - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [40 CFR §122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR §122.41(n)(4)].

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [40 CFR §122.41(f)].

If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this General permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Discharger so notified.

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [40 CFR §122.41(b)].

### **C. Transfers**

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [40 CFR §122.41(l)(3)] [40 CFR §122.61].

### **D. Severability**

The provisions of this General Permit are severable and if any provisions of this General Permit or the application of any provisions of this General Permit to any circumstance is held invalid, the applications of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.

### **E. Pollution, Contamination, or Nuisance [CWC §13050].**

Neither the treatment nor the discharge shall create a condition of pollution, contamination or nuisance.

## **III. STANDARD PROVISIONS – MONITORING**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR §122.41(j)(1)].
- B.** Monitoring results must be conducted according to test procedures under 40 CFR section 136 or, in the case of sludge use or disposal, approved under 40 CFR section 136 unless otherwise specified in 40 CFR section 503 unless other test procedures have been specified in this Order [40 CFR §122.41(j)(4)] [40 CFR §122.44(i)(1)(iv)].

## **IV. STANDARD PROVISIONS – RECORDS**

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR section 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR §122.41(j)(2)].

### **B. Records of monitoring information shall include:**

- 1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];



2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
3. The dimensions, size and/or volume of vault;
4. The duration of the discharge;
5. The estimated volume of discharge;
6. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
7. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
8. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
9. The results of such analyses [40 CFR §122.41(j)(3)(vi)].

**C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:**

1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and
2. Permit applications and attachments, permits and effluent data [40 CFR §122.7(b)(2)].

**V. STANDARD PROVISIONS – REPORTING**

**A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [40 CFR §122.41(h)] [CWC 13267].

**B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with paragraph (B.2) and (B.3) of this provision [40 CFR §122.41(k)].
2. All permit applications shall be signed as follows:
  - a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary,

- treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [40 CFR §122.22(a)(1)];
- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 CFR §122.22(a)(2)]; or
  - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR §122.22(a)(3)].
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in paragraph (B.2) of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- a. The authorization is made in writing by a person described in paragraph (B.2) of this provision [40 CFR §122.22(b)(1)];
  - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [40 CFR §122.22(b)(2)]; and
  - c. The written authorization is submitted to the Regional Water Board, State Water Board, or USEPA [40 CFR §122.22(b)(3)].
4. If an authorization under paragraph (B.3) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (B.3) of this provision must be submitted to the Regional Water Board, State Water Board

or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].

5. Any person signing a document under paragraph (B.2) or (B.3) of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations" [40 CFR §122.22(d)].

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the MRP in this Order [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR section 136 or, in the case of sludge use or disposal, approved under 40 CFR section 136 unless otherwise specified in 40 CFR section 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [40 CFR §122.41(l)(4)(iii)].

### **D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [40 CFR §122.41(l)(5)].

### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall

also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].

2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].
  - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [40 CFR §122.41(l)(6)(ii)(C)].
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR §122.41(l)(6)(iii)].

#### **F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR §122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [40 CFR §122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §122.41(l)(1)(ii)]; or
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 CFR §122.41(l)(1)(iii)].

## **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [40 CFR §122.41(l)(2)].

## **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 CFR §122.41(l)(7)].

## **I. Discharge Monitoring Quality Assurance (DMQA) Program [STATE WATER BOARD/USEPA 106 MOA]**

The Discharger shall conduct appropriate analyses on any sample provided by USEPA as part of the DMQA program. The results of such analyses shall be submitted to USEPA's DMQA manager.

## **J. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR §122.41(l)(8)].

# **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A. NOT APPLICABLE.** The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person

who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Clean Water Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR §122.41(a)(2)] [CWC 13385 and 13387].

- B. NOT APPLICABLE.** Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day, during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR §122.41(a)(3)].
- C.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both [40 CFR §122.41(j)(5)].
- D.** The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR §122.41(k)(2)].

## **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

### **A. Non-Municipal Facilities**

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe [40 CFR §122.42(a)]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if

that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(1)]:

- a. 100 micrograms per liter (µg/L) [40 CFR §122.42(a)(1)(i)];
  - b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(1)(ii)];
  - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(1)(iii)]; or
  - d. The level established by the Regional Water Board in accordance with 40 CFR section 122.44(f) [40 CFR §122.42(a)(1)(iv)].
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(2)]:
- a. 500 micrograms per liter (µg/L) [40 CFR §122.42(a)(2)(i)];
  - b. 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(2)(ii)];
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(2)(iii)]; or
  - c. The level established by the Regional Water Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(2)(iv)].

**B. Publicly-Owned Treatment Works (POTWs) (Not Applicable)**

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## **ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)**

Title 40 of the Code of Federal Regulations (CFR) section 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### **I. GENERAL MONITORING PROVISIONS**

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring location identified in the representative sampling and analysis program. Another waste stream, body of water, or substance shall not dilute the monitored discharge. Monitoring points shall not be changed without notification to and the approval of the appropriate Regional Water Board.
- B. Monitoring must be conducted according to USEPA test procedures approved under 40 CFR section 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act* as amended, unless other test procedures are specified in this Order and/or by the appropriate Regional Water Board.
- C. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR section 136, or as specified in this Order or by the appropriate Regional Water Board, the results of the monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's Annual Report. The increased frequency of monitoring shall also be reported.
- D. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.
- E. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the appropriate Regional Water Board.
- F. All monitoring instruments and devices used by the Discharger to fulfill the monitoring program shall be properly maintained and calibrated to ensure accuracy. All flow measurement devices shall be calibrated at least once per year to ensure accuracy of the devices.

### **II. MONITORING LOCATIONS**

- A. Dischargers enrolling for the first time under this General Permit shall develop a representative sampling and analysis program to be used as case studies to represent the typical types of discharges occurring within their service areas. This

study, to be submitted as the first annual report, will include the monitoring locations and rationale for choosing those locations.

- B. Re-enrollees must submit a new case study defining monitoring locations and rationale for these locations, if there are new types of discharges.

### **III. INFLUENT MONITORING REQUIREMENTS (Not Applicable)**

### **IV. EFFLUENT MONITORING REQUIREMENTS**

- A. Dischargers who are enrolling for the first time under this General Permit shall develop a representative sampling and analysis program to be used as case studies to represent the typical types of discharges from utility vaults and underground structures. Separate case studies are required for each region. Re-enrollees are required to submit case studies only for newly identified types of discharges not previously covered in the initial case studies. The case studies will be used to provide reasonable assurance that the discharges will comply with the requirements of the General Permit. The case studies shall be completed within six months of enrollment under the General Permit, or within twelve months when no discharge occurs within the first six months. In the case studies, the Discharger shall define the types of discharges that occur and take up to five<sup>1</sup> representative samples of each type of discharge and analyze the samples using test procedures specified in 40 CFR section 136 for the following constituents:
- Total Petroleum Hydrocarbons (TPH)
    - TPH as Gasoline (TPH-g) - Report Benzene, Ethylbenzene, Toluene, and Xylene
    - TPH as Diesel (TPH-d)
  - Oil and Grease
  - pH
  - Total Suspended Solids (TSS)
- B. Samples taken shall be representative of the monitored activities and shall be performed after the implementation of the Pollution Prevention Practices (PPPs) outlined in the Pollution Prevention Plan (PLAN).
- C. The Discharger shall provide in the case studies at least the following:
1. A list of the typical types of discharges that occur in the project area.
  2. A rationale for the selection of sampling locations.
  3. A description of the sampling methods, locations, and frequency of monitoring for each type of discharge.
  4. The results of any analysis done for each type of discharge.

<sup>1</sup> If there are less than five discharges, the number samples should be equal to the number of discharges for that year. For example, if a small utility only dewater three vaults in a year, only three samples can and should be submitted in the annual report. The discharger must include an explanation of this in the annual report's cover letter.

- D. First time enrollees shall submit case studies with the first annual report, as described in Section II, which constitutes the first year's annual monitoring. Case studies for newly identified types of discharges not previously covered or submitted with the first annual report shall be submitted with the annual report for that same year.
- E. The Discharger shall provide a map showing the location of the samples taken for the case studies with respect to the distribution system. The map must also show the surface waters within the boundaries of the service area to which water may be discharged.
- F. Annually, the Discharger, using test procedures specified in 40 CFR section 136, shall analyze a representative sample for each type of discharge listed in the case studies required by Provision IV.A.1. above for the following constituents:

| Parameter                    | Units          | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|------------------------------|----------------|-------------|----------------------------|---------------------------------|
| TPH                          | mg/L or ug/L   | Grab        | Case Study & Annual        |                                 |
| Oil and Grease               | mg/L           | Grab        | Case Study & Annual        |                                 |
| pH                           | Standard Units | Grab        | Case Study & Annual        |                                 |
| Total Suspended Solids (TSS) | mg/L           | Grab        | Case Study & Annual        |                                 |

Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports.

The results of such analysis shall be reported in the annual report. Grab samples shall be collected at the applicable point of discharge (either at the storm drain or the receiving water). If a Discharger monitors the above constituents more frequently than required by this General Permit, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the annual report. Separate annual reports are required for each region.

- G. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of this Regional Water Board. These records shall include:
1. The date, place, and time of site inspections, sampling, visual observation, and/or measurement;
  2. The individual(s) who performed the site inspections, sampling, visual observations, and/or measurements;
  3. The dimension, size and/or volume of vault;
  4. Flow measurements (if required) and duration of discharge;

5. The estimated volume of discharge;
6. The date and time of analyses;
7. The laboratory, staff, or wholesaler who performed the analyses;
8. Analytical results.

**V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS (Not Applicable)**

**VI. LAND DISCHARGE MONITORING REQUIREMENTS (Not Applicable)**

**VII. RECLAMATION MONITORING REQUIREMENTS (Not Applicable)**

**VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER (Not Applicable)**

**IX. OTHER MONITORING REQUIREMENTS (Not Applicable)**

**X. REPORTING REQUIREMENTS**

**A. General Monitoring and Reporting Requirements**

The Discharger will submit the case studies as the first annual report. All reports submitted in response to this General Permit shall comply with signatory requirements set forth in V.B.2 in Attachment D. All reports shall be submitted to the appropriate Regional Water Board Executive Officer.

**B. Self Monitoring Reports (SMRs)**

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall submit annual monitoring results to the Regional Water Board by the **20th day of March** for the preceding calendar year. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections VI through IX. Additionally, the Discharger shall report in the SMR the results of any **PPP and PLAN** required by Special Provisions – VI.C.3 of this Order. The Discharger shall submit **annual** SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. The Discharger shall submit SMRs in accordance with the following requirements:

- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that are entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of this Order; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- c. SMRs must be submitted to the appropriate Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D).

#### **C. Discharge Monitoring Reports (DMRs)**

When requested by USEPA, the Discharger shall also complete and submit Discharge Monitoring Reports to USEPA. The submittal date shall be specified in the request.

#### **D. Other Reports (Not Applicable)**

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GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT  
FOR DISCHARGES FROM UTILITY VAULTS AND UNDERGROUND STRUCTURES TO SURFACE WATERS  
ORDER NO. 2006-0008-DWQ  
NPDES NO. CAG990002

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## ATTACHMENT F – FACT SHEET

As described in section III of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

### I. PERMIT INFORMATION

- A. **Background.** In 1972, the Federal Water Pollution Control Act, currently referred to as the Federal Clean Water Act (CWA), was amended to provide that the discharge of pollutants to waters of the United States from any point source is prohibited, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The federal regulations allow authorized states to issue either general permits or individual permits to regulate discharges of pollutants to waters of the United States. On August 15, 1996, the State Water Resources Control Board (State Water Board) issued a General Permit for discharges from utility vaults and underground structures to surface waters. The permit was reissued on July 19, 2001.

In accordance with Title 40, Code of Federal Regulations (CFR), the State Water Board must meet general program requirements prior to the re-issuance and adoption of a general NPDES permit. General program requirements include preparing a draft General Permit, public noticing, allowing a public comment period, and conducting a public hearing. To meet these requirements, the State Water Board prepared a draft General Permit. The draft General Permit was sent to interested parties on May 9, 2006 for comments. A public hearing to receive testimony from interested parties was scheduled for July 19, 2006. The Notice of Public Hearing was sent to the interested party list at the same time the draft General Permit was sent. A public hearing notice was also posted in major newspapers throughout the State of California on May 9, 2006.

This General Permit reissues the 2001 permit Order No. 2001-11-DWQ. Since the original permit was adopted in 1996, the United States Environmental Protection Agency (USEPA) promulgated the California Toxics Rule (CTR) in May 2000. The CTR, which is codified in 40 CFR section 131.38, establishes numeric criteria for priority toxic pollutants for California. The CTR and National Toxics Rule (NTR) criteria and water quality objectives for priority pollutants in state-adopted water quality control plans (Basin Plans), together with designated beneficial uses in those plans, serve as priority pollutant standards for the state. Concurrently with the CTR adoption, the State Water Board adopted a *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP).

- B. **General Criteria.** This General Permit is intended to cover short-term intermittent discharges of pollutants to surface waters from utility vaults and underground structures. To be covered by this General Permit, discharges must meet the following criteria:
1. Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an exceedance of any applicable criterion



established by the USEPA pursuant to CWA section 303. Likewise, pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an exceedance of any water quality objective adopted by the State or Regional Water Board including prohibitions of discharge for the receiving water.

The discharge does not cause acute or chronic toxicity in the receiving water.

This General Permit does **not** cover:

1. Discharges from vehicle and equipment washing, vehicle maintenance, and/or groundwater cleanup activities by utility companies.
2. Utility service construction activities by utility companies engaged in developing service areas. These activities may be covered under the statewide general NPDES permit for storm water discharges associated with construction activities (CAS000002) and/or CWA section 401 certifications.
3. Discharges by utility companies that are Dischargers and/or co-Dischargers under Urban Areawide Storm Water Permits, which cover the intended discharges.
4. Discharges to a sanitary sewer. These discharges do not need regulatory coverage under the NPDES Program, although the agency controlling the sanitary sewer must approve discharges to its conveyance system.

## **II. NOTIFICATION REQUIREMENTS**

The purpose of this General Permit is to facilitate regulation of discharges from the dewatering of utility vaults and underground structures. To obtain coverage under this General Permit, the Discharger must submit a Notice of Intent (NOI), a project map(s), a Pollution Prevention Plan (PLAN), and first annual fee. Discharges in more than one Regional Water Quality Control Board (Regional Water Board) boundary must be covered by a separate enrollment under this General Permit. Each enrollment will cover all discharges occurring within the boundaries of that Regional Water Board. Signing the certification on the NOI signifies that the Discharger intends to comply with the provisions of this General Permit. An NOI must be signed to be valid.

## **III. DISCHARGE DESCRIPTION**

Vaults are used to house meters, filters, pressure regulators, and valves with or without actuators. Structures can be either wet or dry. Wet structures include manholes and hand holes containing cables, cable connections, and signal enhancers. Dry structures are sealed more tightly and are usually air conditioned since these contain switchgears, computers, and electronics that are sensitive to heat and moisture.

For safety reasons, utility companies must de-water vaults and underground structures prior to performing any repair, maintenance, and/or installation of equipment. When the amount of water in the vaults or structures interferes with the safety and quality of the work to be done, water must be pumped out. Volume of discharges can vary from a few gallons to a few thousand gallons depending on the configuration and individual situation at each vault or structure. The duration of the discharges could last a few minutes to a few hours depending on the amount of water present in the vaults and underground structures and the pump used. Typical pump rates are five gallons per minute (gpm) to 20 gpm but could be as high as 60 gpm.

**A. Description of Wastewater and Biosolids Treatment or Controls (Not Applicable)**

**B. Discharge Points and Receiving Waters**

Under the General Permit, there may be multiple discharge points. Information regarding the receiving waters can be found in the completed NOI.

**C. Summary of Existing Requirements and Self-Monitoring Report Data**

Order No. 2001-11-DWQ, which this General Permit replaces, also required the development of Pollution Prevention Practices (PPPs) and a PLAN. The significant change is in the Monitoring and Reporting Program (MRP) requirements. The 2001 Order required the monitoring of total petroleum hydrocarbons (TPH), but did not specify between diesel and gasoline. It also did not explicitly state that monitoring was required in every region for those Dischargers operating in more than one region. It was implied by the term “representative,” but not stated directly. On February 28, 2005, in *Waterkeeper Alliance Inc., et al. v. EPA*, the 2<sup>nd</sup> Circuit Court of Appeals determined that nutrient management plans must be submitted as part of the NPDES permit application and subject to review and approval. The changes to the PLAN requirements in this permit reflect this Court Decision.

**D. Compliance Summary (Not Applicable)**

**E. Planned Changes (Not Applicable)**

**IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

**A. Legal Authorities**

This Order is issued pursuant to section 402 of the CWA and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as an NPDES permit for point source discharges from utility vaults and underground structures to surface waters. This Order also serves as

Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

States may request authority to issue general NPDES permits pursuant to 40 CFR section 122.28. On June 8, 1989, the State Water Board submitted an application to the USEPA requesting revisions to its NPDES Program in accordance with 40 CFR 122.28, 123.62, and 403.10. The application included a request to add general permit authority to its approved NPDES Program. On September 22, 1989, the USEPA, Region 9, approved the State Water Board's request and granted authorization for the State to issue general NPDES permits.

## **B. California Environmental Quality Act (CEQA)**

This action to adopt an NPDES permit is exempt from the provisions of the CEQA (Public Resources Code section 21100, et seq.) in accordance with section 13389 of the CWC.

State Water Board action on case-by-case exceptions is subject to the California Environmental Quality Act (CEQA). Because a Discharger cannot obtain coverage under this General Permit if pollutants in the discharge, cause, contribute, or have the reasonable potential to cause or contribute to a water quality standards violation and the permit requires Dischargers to implement PPPs to ensure the Dischargers will not cause a violation, the State Water Board's granting of the exceptions does not have the potential for causing significant adverse environmental effects. This General Permit is, therefore, exempt from CEQA. See California Code of Regulations, Title 14, section 15061(b)(3).

## **C. State and Federal Regulations, Policies, and Plans**

- 1. Water Quality Control Plans.** The Regional Water Boards have adopted a Water Quality Control Plans (hereinafter Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives for all waters addressed through the plans. In addition, State Water Board Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Boards assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plans. The limitations set forth in this General Permit shall apply as is unless there are more stringent provisions expressed in the Regional Water Boards' Basin Plans.
- 2. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
- 3. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the SIP, which became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their

basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP includes procedures for determining the need for and calculating Water Quality-Based Effluent Limitations (WQBELs), and requires Dischargers to submit data sufficient to do so. In this permit the State Water Board grants an exception from sections 1.3 (Determination of Priority Pollutants Requiring WQBELs) and 1.4 (Calculations of Effluent Limitations) of the SIP because numeric effluent limitations are infeasible for discharges from utility vaults and underground structures. Granting an exception will not compromise protection of inland surface water, bay, or estuarine beneficial uses and will serve the public interest because:

- a. A Discharger cannot be covered under this General Permit if the discharge can cause or contribute to a violation of any applicable water quality standard, including priority pollutant standards.
- b. All Dischargers covered under this General Permit must implement a PLAN to ensure compliance with all applicable water quality standards, including standards for priority pollutants.

The SIP establishes procedures for selecting priority pollutants requiring WQBELs and for calculating the limits. The SIP also authorizes case-by-case exceptions if the State Water Board determines that (1) the exceptions will not compromise protection of surface water beneficial uses, and (2) the public interest will be served. This proposed revision of the General Permit approves case-by-case exceptions from the SIP provisions on the selection of priority pollutants requiring limits (section 1.3) and the calculation of numeric limitations (section 1.4). The permit proposes these exceptions because numeric effluent limitations for discharges from utility vaults and underground structures to surface waters are infeasible.

This General Permit meets the conditions for case-by-case exceptions from the SIP provisions on selection of pollutants requiring WQBELs and calculation of numeric limits. Although the permit does not contain numeric effluent limitations for toxic pollutants, granting the exceptions will not compromise the protection of surface water beneficial uses for several reasons. First, no Discharger can obtain coverage under the permit if pollutants in the discharge have the reasonable potential to cause or contribute to a water quality standards violation. Second, the permit requires Dischargers to implement pollutant prevention practices to ensure that the discharges will not cause a water quality standards violation.

Because the conditions of the case-by-case exception have been met, the State Water Board will continue to grant an exception based on the following:

- a. A Discharger cannot obtain coverage under this General Permit if pollutants in the -discharge have the reasonable potential to cause or contribute to a water quality standards violation.
  - b. This General Permit requires Dischargers to implement PPPs to ensure that discharges will not cause a violation of any applicable objectives (or criteria) in the receiving waters.
  - c. Discharges from utility vaults and underground structures to surface waters will not have the potential to cause significant adverse environmental effects provided the conditions of the newly adopted General Permit are met.
4. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation policy where applicable. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. As discussed in detail in this Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution No. 68-16.
5. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. **All effluent limitations in the Order are at least as stringent as the effluent limitations in the previous Order.**
6. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to implement Federal and State requirements. This MRP is provided in Attachment E.

#### **D. Impaired Water Bodies on CWA 303(d) List (Not Applicable)**

#### **E. Other Plans, Policies and Regulations (Not Applicable)**

### **V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source Dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR section 122.44(d) requires that permits include

water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality criteria have not been established, three options exist to protect water quality: 1) 40 CFR section 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); 2) proposed state criteria or a state policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established.

## **A. Discharge Prohibitions**

Discharges under this Order are required to be nontoxic. Toxicity is the adverse response of organisms to chemicals or physical agents. This prohibition is based on the Regional Water Boards' Basin Plans, which require that all waters be maintained free of toxic substances in concentrations that are lethal or produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. Basin Plans also require waters to be free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, or animal life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.

## **B. Technology-Based Effluent Limitations (TBELs)**

### **1. Scope and Authority**

The CWA requires that TBELs be established based on several levels of controls:

- A. Best Practicable Treatment Control Technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.
- B. Best Available Technology Economically Achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.
- C. Best Conventional Pollutant Control Technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- D. New Source Performance Standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop Effluent Limitations, Guidelines and Standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR section 125.3 of the NPDES regulations authorize the use of Best Professional Judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR section 125.3.

## **2. Applicable Technology-Based Effluent Limitations**

It is not feasible to establish numeric effluent limitations for pollutants in discharges from utility vaults and underground structures. Instead, the provisions of this General Permit require implementation of Pollution Prevention Practices (PPPs) to control and abate the discharge of pollutants to surface waters and to achieve compliance utilizing BAT and BCT requirements and with applicable water quality standards.

## **C. Water Quality-Based Effluent Limitations (WQBELs)**

### **1. Scope and Authority**

As specified in 40 CFR section 122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, achieve applicable water quality objectives and criteria contained in state plans and policies, and meet water quality criteria in the CTR and NTR.

### **2. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

The designated beneficial uses of surface waters throughout the State may include municipal, domestic, industrial, and agricultural supply; water contact and non-contact recreation; navigation; groundwater recharge and freshwater replenishment; hydropower generation; wildlife habitat; cold freshwater and warm freshwater habitat; fish migration and fish spawning; marine habitat; estuarine habitat; shellfish harvesting; ocean commercial and sport fishing; areas of special biological significance; and preservation of rare and endangered species. To the extent that the applicable Basin Plan designates additional or different beneficial uses, the Basin Plan shall control.

### **3. Determining the Need for WQBELs**

NPDES permits for discharges to surface waters must meet all applicable provisions of sections 301 and 402 of the CWA. These provisions require controls of pollutant discharges that utilize BAT and BCT to reduce pollutant and any more stringent controls necessary to meet water quality standards.

Utility companies may have multiple discharges from utility vaults and other underground structures as a result of storm water inflow, subterranean seepage, and/or water condensation from the air conditioning units of dry structures. These vaults and underground structures may have small quantities of oil and grease present due to the normal operation of equipment, as well as small quantities of other pollutants. Establishment of numeric effluent limitations for pollutants from utility vaults and underground structures is not feasible because: (1) utility companies have numerous short duration intermittent releases of water to surface waters from many different locations, and (2) treatment of all these releases to meet numeric effluent limitations would be impractical.

Therefore, the effluent limitations contained in this General Permit are narrative and include the requirement to implement appropriate PPPs, which are equivalent to Best Management Practices (BMPs). Section 122.44(k)(3) of 40 CFR allows the use of BMPs to control or abate the discharge of pollutants when “Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.” It is not feasible to establish WQBELs for pollutants in discharges from utility vaults or underground structures; therefore, in lieu of WQBELs, this Order requires Dischargers to establish PPPs in PLANS.

The PPPs, which may include treatment of discharges to surface waters, will constitute BAT and BCT and are required to achieve compliance with water quality standards. Receiving water requirements must be met by the Discharger and are stated as either numerical or narrative requirements, as appropriate. They are intended to cover all applicable Basin Plan objectives, including narrative toxicity objectives, total residual chlorine objectives (if applicable), and all applicable federal criteria, including CTR and NTR criteria.

**4. WQBEL Calculations (Not Applicable)**

**5. Whole Effluent Toxicity (WET) (Not Applicable)**

**D. Final Effluent Limitations (Not Applicable)**

**E. Interim Effluent Limitations (Not Applicable)**

**F. Land Discharge Specifications (Not Applicable)**

**G. Reclamation Specifications (Not Applicable)**

**VI. RATIONALE FOR RECEIVING WATER LIMITATIONS**

**A. Surface Water**

Receiving Water Limitations are based upon water quality objectives contained in appropriate Regional Water Board Basin Plans, statewide Water Quality Control Plan, or criteria promulgated by USEPA pursuant to CWA section 303.



**B. Groundwater (Not Applicable)**

**VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Water Boards to require technical and monitoring reports. The MRP, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for utility vault and underground structure discharges.

**A. Influent Monitoring (Not applicable)**

**B. Effluent Monitoring**

In reviewing the monitoring reports, the State Water Board found that although Dischargers were reporting TPH, a distinction between diesel and gasoline was not always made. TPH should be reported as a total and as TPH diesel and TPH gasoline (TPH-g). Also, for detections of TPH-g, the amount of benzene, ethylbenzene, toluene, and xylene should be reported. Benzene, ethylbenzene, and toluene are priority pollutants per 40 CFR section 131.

**C. Whole Effluent Toxicity Testing Requirements (Not Applicable)**

A Whole Effluent Toxicity (WET) Limit is required if a discharge causes, has a reasonable potential to cause, or contributes to an exceedance of applicable water quality standards, including numeric and narrative. Since these types of discharges are prohibited under this General Permit, WET limits are not applicable.

**D. Receiving Water Monitoring (Not Applicable)**

**E. Other Monitoring Requirements (Not Applicable)**

**VIII. RATIONALE FOR PROVISIONS**

**A. Standard Provisions**

Standard Provisions, which in accordance with 40 CFR sections 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D.

**B. Special Provisions**

**1. Reopener Provisions (Not Applicable)**

**2. Special Studies and Additional Monitoring Requirements (Not Applicable)**

### **3. Best Management Practices and Pollution Prevention Plan (PLAN)**

The development of PPPs provides the flexibility necessary to establish controls, which can appropriately address the different situations in which utility companies discharge water to surface waters. The PPPs have two major objectives:

- a. To identify situations which allow water to collect in the vault or underground structure and lead to a discharge.
- b. To describe and ensure the implementation of practices that will reduce pollutants in the discharge from the normal operations of utility companies.

At this time, standard industrywide PPPs have not been developed for utility companies. The Discharger must prepare a PLAN and implement it whenever there is a discharge. If standard industrywide PPPs are developed, then each utility company may utilize those standard PPPs or develop a PLAN utilizing selected standard PPPs as appropriate. PLANs must meet the specifications described in section VI.C.3. For help in developing a PLAN, refer to the following document: *California Stormwater BMP Handbook - Industrial/Commercial (January 2003 Edition)*, published by the California Stormwater Quality Association. It is available online at: <http://www.cabmphandbooks.com> and provides references the Discharger may find useful.

Dischargers must show that no feasible alternatives to surface water discharge exist and that measures have been or will be employed to minimize potential impacts. Based on the authority contained in section 304(e) of the CWA and the regulations set forth in 40 CFR 122.44(k), the states may incorporate PPPs, which are equivalent to BMPs, into NPDES permits.

### **4. Compliance Schedules (Not Applicable)**

### **5. Construction, Operation, and Maintenance Specifications (Not Applicable)**

### **6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)**

### **7. Other Special Provisions**

- a. Although this is a State Water Board permit, the Regional Water Boards are responsible for reviewing monitoring reports, reviewing and approving Discharger's PLANs, conducting compliance inspections, and taking enforcement actions in order to maintain water quality control in waters of their region.
- b. Dispose of solids removed from liquid wastes in a manner that is consistent with Title 27, of the California Code of Regulations and approved by the appropriate Regional Water Board's Executive Office.

## **IX. PUBLIC PARTICIPATION**

In considering the re-issuance and adoption of the General Permit for utility vaults and underground structures, the State Water Board staff has developed a draft General Permit. The State Water Board encouraged public participation in the WDR adoption process.

### **A. Notification of Interested Parties**

The State Water Board notified interested agencies and persons of its intent to prescribe waste discharge requirements in this General Permit and provided them with an opportunity to submit their written comments and recommendations. On May 9, 2006 notification was provided on the State Water Board webpage and in the following newspapers: Santa Rosa Press Democrat, San Francisco Daily Journal, San Luis Obispo Tribune, Los Angeles Daily Journal, Sacramento Daily Recorder, Victorville Daily Press, Palm Springs Desert Sun, and San Diego Daily Transcript. On May 9, 2006, the State Water Board sent out notification through a Lyris electronic mail list and by U.S. Post.

### **B. Written Comments**

The staff determinations were tentative. Interested persons were invited to submit written comments concerning this tentative General Permit. Comments were to be submitted either in person, or by fax, email, or mail to the Executive Office at the State Water Board at the address on the cover page of this permit.

To be fully addressed by staff and considered by the State Water Board, written comments must have been received at the State Water Board office by 5:00 p.m. on **June 9, 2006**.

### **C. Public Hearing**

The State Water Board held a public hearing on the tentative General Permit during its regular Board meeting on the following date and time and at the following location:

Date: **July 19, 2006**  
Time: **10 a.m.**  
Location: **Coastal Hearing Room Joe Serna Jr./CAL/EPA Building**  
**1001 I Street, 2<sup>nd</sup> Floor**  
**Sacramento, CA 95814**

Interested persons were invited to attend. At the public hearing, the State Water Board heard testimony pertinent to the discharge and General Permit. Oral testimony was heard.

#### **D. Information and Copying**

Order-related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the State Water Board by calling (916) 341-5455.

#### **E. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the General Permit was invited to contact the State Water Board, reference this General Permit, and provide a name, address, and phone number.

#### **F. Additional Information**

Requests for additional information or questions regarding this General Permit were directed to **Erin Mustain** at **(916) 445-9379**.

This General Permit will expire on July 19, 2011. Enrollees covered under this General Permit at the time of expiration will automatically be re-enrolled under the reissued permit, until the effective date of this permit, unless a Notice of Termination or Transfer (NOTT) is submitted to terminate coverage.

## Appendix E: Defined Terms

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## E.1 Defined Terms

### Biochemical Oxygen Demand (BOD)

BOD refers to the oxygen used in meeting the metabolic needs of aerobic microorganisms in water containing organic matter. The higher the level of organic matter, the higher the BOD. For example, water polluted with sewage would have a high BOD.

### 303(d) List

The 303(d) list is a list of water bodies that have one or more beneficial uses that are impaired by one or more pollutants. Creation and maintenance of the list is required by Section 303(d) of the CWA. The State must take appropriate action to improve impaired water bodies, for example through the development of a TMDL.

### Basin Plan

A Basin Plan is a water quality control plan developed by each Regional Board to identify designated beneficial uses and water quality objectives for the water bodies and watershed areas within that specific region.

### Beneficial Uses

Streams, lakes, rivers, and other water bodies, have uses to humans and other life; these uses are referred to as the beneficial uses of a water body. The beneficial uses of waters in California are described in the Basin Plans adopted by the nine California Regional Boards. Section 13240 of the California Water Code requires adoption of water quality control plans, called Basin Plans, for the protection of water quality within the State's watersheds. Discharges from stormwater drainage systems may convey pollutants to waters of the State, and therefore may have an adverse impact on the beneficial uses of that water resource. Beneficial uses fall into one or more of the following categories:

- Agricultural Supply (AGR) – water used for irrigation, leaching of salts, stock watering, etc.;
- Industrial Service Supply (IND) – use of water for industrial activities that do not depend primarily on water quality;
- Industrial Process Supply (PRO) – uses of water that depend primarily on water quality;
- Groundwater Recharge (GWR) – replenishment of groundwater by percolation from surface waters;
- Municipal and Domestic Supply (MUN) – water supply systems including drinking water supply;
- Freshwater Replenishment (FRSH) – maintenance of surface water quality or quantity;
- Cold Freshwater Habitat (COLD) – maintenance of cold water ecosystems;
- Warm Freshwater Habitat (WARM) – maintenance of warm water ecosystems;
- Estuarine Habitat (EST) – habitat resulting from commingling of freshwater and saltwater;
- Wildlife Habitat – (WILD) water used to support terrestrial or aquatic ecosystems;
- Preservation of Biological Habitats of Special Significance (BIOL) – water used to support designated areas such as refuges, parks or sanctuaries;
- Spawning, Reproduction, and/or Early Development (SPWN) - water used to support aquatic habitats suitable for reproduction and early development of fish;
- Migration of Aquatic Organisms (MIGR) – water used to support migration or other temporary aquatic organism uses;
- Rare, Threatened, or Endangered Species (RARE) – water used to support aquatic habitats necessary for the survival and maintenance of rare, threatened or endangered species;

- Aquaculture (AQUA) – using water for the propagation, cultivation, maintenance, or harvesting of aquatic plants or animals;
- Shellfish Harvesting (SHELL) – water used to support habitats for the maintenance of filter feeding shellfish;
- Commercial and Sport Fishing (COMM) – collecting fish for commercial or recreational purposes;
- Hydropower Generation (POW) – water used to produce electricity;
- Navigation (NAV) – the use of water for shipping or travel;
- Water Contact Recreation (REC-1) – recreational activities involving body contact with water; and
- Non-Contact Water Recreation (REC-2) – recreational activities involving proximity to water, but generally no body contact or ingestion of water.

### Best Available Technology (BAT)

BAT is a term derived from Section 301(b) of the CWA and refers to BMPs to reduce toxic and non-conventional pollutants in discharges from construction sites. Toxic pollutants are those defined in Section 307 (a)(1) of the CWA and include heavy metals and manmade organics. Non-conventional pollutants are those not covered by conventional and toxic pollutants, such as ammonia, chloride, toxicity and nitrogen.

### Best Conventional Technology (BCT)

BCT is a term derived from Section 301(b) of the federal CWA and refers to BMPs to reduce conventional pollutants in discharges from construction sites. Conventional pollutants include TSS, oil and grease, fecal coliforms, pH and other pollutants.

### Best Management Practice (BMP)

A BMP is a measure that is implemented to protect water quality and reduce potential for pollution associated with stormwater runoff. Any program, technology, process, siting criteria, operating method, or device that controls, prevents, removes, or reduces pollution. There are four categories of BMPs: Maintenance, Design Pollution Prevention, Construction Site, and Treatment:

#### Maintenance

Maintenance BMPs are water quality controls used to reduce pollutant discharges during highway maintenance activities and activities conducted at maintenance facilities. These BMPs are technology-based controls that attain MEP pollutant control. This category of BMPs includes litter pickup, toxics control, street sweeping, etc.

#### Design Pollution Prevention

Design Pollution Prevention BMPs are permanent water quality controls used to reduce pollutant discharges by preventing erosion. These BMPs are standard technology-based, non-treatment controls selected to reduce pollutant discharges to the MEP requirements. They are applicable to all projects. This category of BMPs includes preservation of existing vegetation; concentrated flow conveyance systems, such as ditches, berms, dikes, swales, overside drains, outlet protection/velocity dissipation devices; and slope/surface protection systems such as vegetated surfaces and hard surfaces.

#### Construction Site

Construction site BMPs are temporary controls used to reduce pollutant discharges during construction. These controls are best conventional technology/best available technology BCT/BAT based BMPs that may include soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management and waste management.



## Treatment

Treatment BMPs are permanent water quality controls used to remove pollutants from stormwater runoff prior to being discharged from Caltrans right-of-way. These controls are used to meet MEP requirements and are considered for projects discharging directly or indirectly to receiving waters. This category of BMPs includes: Traction Sand Traps, Infiltration Devices, Detention Devices, Biofiltration Systems, Dry Weather Flow Diversion, Media Filters, Multi-Chamber Treatment Trains, Wet Basins and GSRDs.

### California Environmental Quality Act (CEQA)

The CEQA of 1970 requires public agencies to prevent significant, avoidable damage to the environment by regulating activities that may affect the quality of the environment. Public agencies accomplish this by requiring projects to consider the use of alternatives or mitigation measures. Regulations for the implementation of CEQA are found in the CEQA Guidelines and are available online by the California Resources Agency at <http://ceres.ca.gov/ceqa>.

### Caltrans Permit

Caltrans Permit refers to the NPDES Statewide Storm Water Permit issued to Caltrans in 2012 (Order No. 2012-0011-DWQ) (CAS000003), to regulate stormwater discharges from Caltrans facilities. The Caltrans Permit does not regulate construction activities.xci The Caltrans Permit only “impose[s] electronic filing, notification, reporting and contractor requirements for certain construction projects, and imposes limitations on types of materials that may be used during construction which may have an impact on post-construction discharges.”xcii

### Clean Water Act (CWA)

The CWA, originally enacted by Congress in 1972, is a federal law that requires states to protect, restore, and maintain the quality of the waters of the United States, including lakes, rivers, aquifers and coastal areas. The CWA, as amended in 1987, is the enabling legislation for the NPDES permitting process.

### Code of Federal Regulations (CFR)

The CFR is a document that codifies all rules of the executive departments and agencies of the federal government. It is divided into 50 volumes, known as titles. Title 40 of the CFR (referenced as 40 CFR) contains federal environmental regulations. 40 CFR is available from bookstores operated by the Government Printing Office and online at: <http://www.epa.gov/epahome/cfr40.htm>.

### Construction General Permit

The General Permit is a Statewide General Permit for construction activities (Order No. 2009-00009-DWQ) (CAS000002) that applies to all stormwater discharges from activities that result in a DSA of at least one acre or more. Construction activity that results in a DSA of less than one acre is may be subject to the Construction General Permit if there is the potential for significant water quality impairment resulting from the construction activity as determined by the Regional Board.

### Construction Site

The term “construction site” applies to all areas both within the construction limits on state right-of-way and areas that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, barges or platforms, etc., whether or not they reside within the Caltrans right-of-way.

### Construction Site Best Management Practices Manual

The Construction Site Best Management Practices Manual provides instructions for the selection and implementation of Construction Site BMPs. Caltrans requires contractors to identify and utilize these BMPs in preparation of their SWPPP or WPCP.

## Discharge

The term “discharge” refers to the amount of water flowing out of a drainage structure or facility. Discharge is often measured in cubic meters per second. It is any release, spill, leak, pump, flow, escape, dumping, or disposal of any liquid, semi-solid or solid substance.

## Disturbed Soil Area (DSA)

The disturbed soil area includes all construction activity that disturbs native soil and fill within the project limits. This does not include routine maintenance activity to maintain existing highways (facilities) or preventative maintenance to maintain highway structures, and existing functions. Asphalt concrete, Portland cement concrete, aggregate base, shoulder backing, bridge decks, sidewalks, buildings, road side ditches, gutters, dikes, and culverts are all part of existing highway facilities.

## Maximum Extent Practicable (MEP) Analysis

The MEP analysis is the process of evaluating the selected BMPs based on legal and institutional constraints, technical feasibility, relative effectiveness, and cost/benefit ratio.

## Metals (Total and Dissolved)

Metals, both total and dissolved, are commonly monitored constituents and, next to TSS and nutrients, are the most common constituents cited in the literature as being present in stormwater runoff.

Trace quantities of many metals are necessary for biological growth and may naturally occur in runoff. Most metals, however, have numeric water quality standards because of their toxicity to aquatic organisms at high concentrations.

The toxicity of some metals is inversely related to water hardness. The numeric water quality standards for cadmium, chromium, copper, lead, nickel, silver and zinc are hardness-dependent. Copper, lead and zinc are the metals most commonly found in highway runoff.

## Municipal Separate Storm Sewer System (MS4)

MS4s are storm drain systems regulated by the federal Phase I and Phase II stormwater regulations. Municipal combined sewer systems are regulated separately. MS4s are defined in the federal regulations at 40 CFR 122.26(b)(8). Caltrans is designated as an MS4 permittee.

## National Pollutant Discharge Elimination System (NPDES) Permit

The NPDES Permit is EPA’s program to control the discharge of pollutants to waters of the United States. NPDES is a part of the federal CWA, which requires point and non-point source dischargers to obtain permits. These permits are referred to as NPDES permits.

## Notice of Intent (NOI)

Information sent to a Regional Board indicating that a permittee would like to be covered under the terms of a NPDES permit or WDR.

## Notice of Termination (NOT)

Information sent to the Regional Water Board indicating that permit coverage is no longer needed and all permit requirements have been met. For example, when a Construction General Permit NOT is filed with a Regional Board, this indicates that construction is complete and final stabilization has been reached or ownership has been transferred.

## Numeric Action Level (NAL)

These are benchmark values, the exceedance of which require the discharger to take action to improve BMP performance or to install additional BMPs. The NALs help to determine if BMPs are working as planned. The Construction General Permit contains effluent pH and turbidity NALs.

### Numeric Effluent Limitations (NEL)

Under the Construction General Permit, Risk Level 2 and Risk Level 3 dischargers were required to comply with receiving water numeric effluent limitations. After these were challenged in court, they were invalidated. Compliance with NELs is no longer required, with one exception. Discharges from active treatment systems are required to meet NELs. NELs for Risk Level 2 and Risk Level 3 dischargers were replaced with receiving water triggers for pH and turbidity.

### Nutrients

Nutrients are nutritive substances such as phosphorous and nitrogen whose excessive input into receiving waters can over-stimulate the growth of aquatic plants.

### Pathogens

Pathogens include viruses, bacteria, protozoa, and possibly helminth worms and are a concern in stormwater runoff. The direct measurement of specific pathogens in water is extremely difficult. The coliform group of organisms is commonly used as an indicator of the potential presence of pathogens of fecal origin.

Sources of total and fecal coliforms in stormwater runoff are common and wide-spread (e.g., soil particles, droppings of wild and domestic animals, etc.). Human sources could include illicit sewer connections and seepage from septic tanks.

### Pesticides

A pesticide is a chemical agent designed to control pest organisms. The most common forms of pesticides are organic chemicals designed to target insects (insecticides) and vascular plants (herbicides).

Chlorpyrifos and Diazinon. Chlorpyrifos and Diazinon are organophosphate pesticides that have been detected in stormwater runoff. Organophosphates exhibit a high pesticidal activity and relatively low persistence in the environment. They also exhibit acute toxicity effects to humans and animals by inhibiting the acetylcholinesterase enzyme activity at nerve endings, which affects the proper functioning of the nervous system. Absorption through the skin is a major route of exposure for all organisms.

### Pollutant

Any constituent present in sufficient quantity to impair beneficial uses of a receiving water body.

### Receiving Water

A river, lake, ocean, stream or other watercourse into which wastewater or treated effluent is discharged.<sup>xciii</sup>

### Resident Engineer (RE)

The RE administers the construction contract, makes decisions regarding acceptability of material furnished and work performed, and exercises contractual authority to direct the contractor. The RE may impose sanctions if the contractor fails to follow the appropriate actions specified in the contract to correct deficiencies.

### Regional Water Quality Control Board (Regional Board)

A Regional Board is the agency responsible for water quality regulation for a region as specified in Section 13200 of the California Water Code. There are nine Regional Boards that serve under the SWRCB. These nine Regional Boards are located in California and are responsible for enforcing water quality standards within their boundaries. A map of these boundaries is located in Appendix A, Figure A-1.

In protecting water quality, each Regional Board:

- Adopts a region-specific Water Quality Control Plan or Basin Plan that contains water quality standards specific to the region's waters;
- Issues waste discharge requirements (WDRs) and water quality monitoring and reporting programs that implement the SWRCB's statewide policy and regulations along with the region-specific water quality standards specified in its Basin Plan; and
- Implements enforceable orders against violations of statewide and region-specific requirement

### Source Controls

Source controls are control measures used on disturbed areas to reduce the introduction of sediment or other pollutants into stormwater runoff. Source controls prevent or limit the exposure of materials to stormwater at the source of those materials.

### State Water Resources Control Board (SWRCB)

As delegated by the EPA, the SWRCB is a California agency that implements and enforces the CWA Section 401 (p) NPDES permit requirements, and is the issuer and administrator of the Caltrans Permit and the Construction General Permit. The SWRCB's mission is to preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

### Storm Water Pollution Prevention Plan (SWPPP)

The Construction General Permit requires all construction projects that result in a DSA of at least one acre to develop and implement an effective SWPPP. The SWPPP is a plan that includes site map(s), an identification of construction/contractor activities that could cause pollutants in stormwater, and a description of measures or practices to control these pollutants. A Regional Board may require a SWPPP for projects which do not meet the DSA acreage requirements based upon water quality concerns.

### Total Suspended Solids (TSS)

TSS is the weight of particles that are suspended in water. Suspended solids in water reduce light penetration in the water column, can clog the gills of fish and invertebrates, and are often associated with toxic contaminants because organics and metals tend to bind to particles.

### United States Environmental Protection Agency (EPA)

The EPA (<http://www.epa.gov/>) provides leadership in the nation's environmental science, research, education, and assessment efforts. The EPA works closely with other federal agencies, state and local governments, and Indian tribes to develop and enforce regulations under existing environmental laws. The EPA is responsible for researching and setting national standards for a variety of environmental programs and delegates to states and tribes responsible for issuing permits, and monitoring and enforcing compliance. The EPA issued regulations to control pollutants in stormwater runoff discharges, such as the CWA.

### Waste Discharge Requirement (WDR)

A WDR is a set of conditions issued by a Regional Board for a specific activity. The conditions may include numeric effluent criteria, monitoring requirements, reporting requirements, and other narrative criteria for discharge. WDRs may be required for any authorized non-stormwater discharge.

### Waterbody

A waterbody is a water of the United States.<sup>xciv</sup> Waters of the United States include: (a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters,

including interstate wetlands; (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial sea; and (g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

### **Water Pollution Control Program (WPCP)**

A WPCP is a plan to identify water quality management practices to be implemented that must be prepared for all construction projects that do not require preparation of a SWPPP. For Caltrans projects disturbing more than one acre, a SWPPP satisfies the requirement for a WPCP.

### **Water Quality Flow (WQF)**

The WQF is a design criterion used for various types of filtration treatment control devices currently under development. Caltrans has cooperatively developed rainfall intensity values with the SWRCB that can be used in the Rational Formula to calculate the WQF.

### **Water Quality Volume (WQV)**

The WQV is the volume of flows associated with the frequent storm events that must be treated. The WQV of treatment BMPs is based upon, where established, the sizing criteria from the Regional Board or local agency (whichever is more stringent). If no sizing criterion has been established, Caltrans will do one of the following: maximize detention volume determined by the 85th percentile runoff capture ratio or; use volume of annual runoff based on unit basin storage WQV to achieve 80 percent or more volume of treatment. For further detail, refer to the Project Planning and Design Guide.

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## Appendix F: Endnotes and Relevant Citations

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## F.1 Endnotes and Relevant Citations

<sup>i</sup> “Authorized non-storm water discharges may include those from . . . uncontaminated groundwater dewatering, and other discharges not subject to a separate NPDES permit adopted by a region.” Construction General Permit, Fact Sheet § E.

<sup>ii</sup> Caltrans, *Statewide Storm Water Management Plan*, CTSW-RT-12-286.19.1, § 4.5, May 2003 (Revised March 2011, March 2012, July 2012).

<sup>iii</sup> “Authorized non-storm water dewatering discharges may require a permit because some Regional Water Boards have adopted General Permits for dewatering discharges.” Construction General Permit, Fact Sheet § E.

<sup>iv</sup> This Dewatering Guide covers many different regulatory devices used by the Regional Boards. Construction General Permit describes the statewide general permit issued by the State Water Resources Control Board that governs construction and land disturbance activities on sites having greater than one acre of land disturbance, Order No. 2009-0009-DWQ (and amendments). The term general NPDES permit is used to refer to the permits issued by the Regional Boards.

<sup>v</sup> “The Contractor shall at all times observe and comply with . . . all existing and future laws, ordinances, and regulations . . . .” Caltrans, *2006 Standard Specifications*, §7-1.01. “Comply with laws, regulations, orders, and decrees applicable to the project.” Caltrans, *2010 Standard Specifications*, §7-1.01.

<sup>vi</sup> Caltrans, *2010 Standard Specifications*, §13-4.01B.

<sup>vii</sup> The Federal definition is contained in the Clean Water Act and is limited to surface waters. “The term ‘navigable waters’ means the waters of the United States, including territorial seas.” 33 U.S. Code § 1362(7). The federal definition has been limited through judicial interpretation, but broadened through agency rulemaking. Under the federal definition not all surface waters are covered under the Clean Water Act. *See also*, Proposed Rule, *Definition of “Waters of the United States” Under the Clean Water Act*, 79 F.R. 22188 (April 21, 2014). The California definition is broader and includes groundwater and saline waters. “‘Waters of the state’ means any surface water or groundwater, including saline waters, within the boundaries of the state.” Cal. Water Code § 13050(e) (2014).

<sup>viii</sup> “This Order does not regulate discharges from the Department’s construction activities, *including dewatering effluent discharges* from construction projects” (emphasis added). California State Water Resources Control Board, Order No. 2012-0011-DWQ, NPDES NO. CAS000003, *National Pollutant Discharge Elimination System (NPDES), Statewide Storm Water Permit Waste Discharge Requirements (WDRs) for State of California Department of Transportation*, Findings, § 9 (September 19, 2012; herein, “Caltrans MS4 Permit”).

<sup>ix</sup> Caltrans MS4 Permit, Findings, § 9.

<sup>x</sup> Caltrans MS4 Permit, § E.2.f.

<sup>xi</sup> “This General Permit authorizes the discharge of storm water to surface waters from construction activities that result in the disturbance of one or more acres of land, provided that the discharger satisfies all permit conditions set forth in the Order.

\* \* \*

This General Permit prohibits the discharge of pollutants other than storm water and non-storm water discharges authorized by this General Permit or another NPDES permit.

\* \* \*

The State Water Board recognizes, however, that certain non-storm water discharges may be necessary for the completion of construction projects. Authorized non-storm water discharges may include those . . . uncontaminated ground water dewatering, and other discharges not subject to a separate general NPDES permit adopted by a region.” Construction General Permit, Fact Sheet § E.

<sup>xii</sup> Construction General Permit, Fact Sheet § E.

<sup>xiii</sup> Lake Tahoe CGP, § II.D.1.a.

<sup>xiv</sup> “Discharges of non-storm water to land or land-based treatment systems may be necessary for certain construction projects. Such discharges include, but are not limited to . . . construction dewatering. These discharges to land are authorized under the following conditions: 1. The discharge does not violate any other provision of this General Permit. 2. The discharge is not prohibited by the Basin Plan or does not require a prohibition exemption from the Lahontan

Water Board for prohibitions contained in the Basin Plan. 3. The Discharger has included and implemented specific BMPs required by this General Permit to prevent or reduce the contact of the non-storm water discharge with construction materials or equipment. 4. The discharge does not contain toxic constituents in toxic amounts.” Lake Tahoe CGP, § III.B.

<sup>xv</sup> “Unless otherwise authorized by a separate waste discharge permit, discharges of material other than storm water, including dewatering waste, to a separate storm sewer system or waters of the state are prohibited. Discharge of dewatering waste to land is covered under this General Permit providing that there are no pollutants present that could degrade groundwater quality. If no land disposal alternatives exist for dewatering waste, the Discharger may seek coverage to discharge dewatering waste to surface waters under a separate NPDES permit by submitting a separate Report of Waste Discharge.” Lahontan Small Construction Permit, § I.G.

<sup>xvi</sup> “Authorized non-storm water discharges may include those from dechlorinated potable water sources such as: . . . uncontaminated ground water from dewatering, and other discharges not subject to a separate general NPDES permit adopted by a Regional Water Board.” Construction General Permit, § III.C.”

<sup>xvii</sup> “All discharges are prohibited except for the storm water and non-storm water discharges specifically authorized by this General Permit or another NPDES permit.” Construction General Permit, § III.B.

<sup>xviii</sup> “The discharge of non-storm water is authorized under the following conditions: 1. The discharge does not cause or contribute to a violation of any water quality standard; 2. The discharge does not violate any other provision of this General Permit; 3. The discharge is not prohibited by the applicable Basin Plan; 4. The discharger has included and implemented specific BMPs required by this General Permit to prevent or reduce the contact of the nonstorm water discharge with construction materials or equipment. 5. The discharge does not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants; 6. The discharge is monitored and meets the applicable NALs and NELs; and 7. The discharger reports the sampling information in the Annual Report.” [“and NELs” was removed by 2012-0006-DWQ, State Water Resources Control Board, National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (July 12, 2012)]

If any of the above conditions are not satisfied, the discharge is not authorized by this General Permit. The discharger shall notify the Regional Water Board of any anticipated non-storm water discharges not already authorized by this General Permit or another NPDES permit, to determine whether a separate NPDES permit is necessary.” Construction General Permit, § III.C.

<sup>xix</sup> State Water Resource Control Board, *Water Quality Order No. 2006-0008-DWQ, NPDES No. CAG990002, General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters*, § III.B (July 19, 2006).

<sup>xx</sup> The permit has been extended administratively. A draft version of the revised Utility Vault permit is expected to be presented for public comment in the latter half of 2014.

<sup>xxi</sup> Codified at California Water Code, § 13100, et. seq. (effective January 1, 2014).

<sup>xxii</sup> See Caltrans, *2010 Standard Specifications*, §13-3.01B(2)(c) and §13-3.01C(1).

<sup>xxiii</sup> “Authorized non-storm water dewatering discharges may require a permit because some Regional Water Boards have adopted General Permits for dewatering discharges.” Construction General Permit, Fact Sheet § E.

<sup>xxiv</sup> “[The] Statewide General Order was adopted to handle those types of discharges that posed a low threat to water quality, but was not intended to supersede the authority of the Regional Water Quality Control Boards to issue individual WDRs or conditional waivers.” California Regional Water Quality Control Board Central Valley Region, *Resolution No. RS-2013-0145 Approving Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge within the Central Valley Region* (December 5, 2013).

<sup>xxv</sup> State Water Resource Control Board, *Water Quality Order No. 2003-0003-DWQ, Statewide General Waste Discharge Requirements (WDRs) for Discharges to Land with a Low Threat to Water Quality (General WDRs)* (April 30, 2003). WQO-2003-0003-DWQ is still in effect and is used if a discharge meets the eligibility requirements.

<sup>xxvi</sup> The word “pollutants”, as defined in the federal Clean Water Act §502(6), is incorporated into the California Water Code § 13373. “The terms ‘navigable waters,’ ‘administrator,’ ‘pollutants,’ ‘biological monitoring,’ ‘discharge’ and ‘point sources’ as used in this chapter shall have the same meaning as in the Federal Water Pollution Control Act and acts amendatory thereof or supplementary thereto [i.e., the CWA].” California Water Code § 13373. “The term ‘pollutant’ means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical

wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.” 33 U.S. Code § 1362(6) [codified in CWA §502(6)].

<sup>xxvii</sup> Caltrans, *SWPPP Template*, § 500.1.1 (October 26, 2012).

<sup>xxviii</sup> Caltrans, *Construction Site Monitoring Program Guidance Manual*, § 6.5.1 (2012)

<sup>xxix</sup> Construction General Permit, § III.

<sup>xxx</sup> Such discharges “shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.”

Construction General Permit, § V.A.1.

<sup>xxxi</sup> Construction General Permit, § V.A.2 (“Dischargers shall minimize or prevent pollutants . . . through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.”). “BAT/BCT technologies not only include passive systems such as conventional runoff and sediment control, but also treatment systems such as coagulation/flocculation using sand filtration, when appropriate.”

Construction General Permit, Fact Sheet, §F.1.

<sup>xxxii</sup> Construction General Permit, Attachment A, § A.

<sup>xxxiii</sup> Construction General Permit, Attachment C, § I.3.b. And if the discharge of such accumulated water will occur after dark, observations must occur before dark. However, visual observations are only required during business hours.

Construction General Permit, Attachment C, § I.3.c.

<sup>xxxiv</sup> The Construction General Permit was amended so that NELs were removed for all types of discharges (i.e., Risk Level 1, 2, and 3), except for those from ATS. Receiving water triggers were included in the amended Construction General Permit. Receiving water triggers are effluent pH and turbidity limits. Failure to remain within those limits does not comprise a violation of the Construction General Permit. However, failure to conduct receiving water sampling when these limits are exceeded and comply with other related parts of the Construction General Permit may be considered a violation. State Water Resources Control Board, *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*, Order No. 2012-0006-DWQ (July 17, 2012).

<sup>xxxv</sup> Caltrans, *SWPPP Template*, § 500.1.1 (October 26, 2012).

<sup>xxxvi</sup> Construction General Permit, §III.

<sup>xxxvii</sup> *Id.*, §V.A.1 (Such discharges “shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.”).

<sup>xxxviii</sup> Construction General Permit, §V.A.2 (“Dischargers shall minimize or prevent pollutants . . . through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.”). “BAT/BCT technologies not only include passive systems such as conventional runoff and sediment control, but also treatment systems such as coagulation/flocculation using sand filtration, when appropriate.”

Construction General Permit, Fact Sheet, § F.1.

<sup>xxxix</sup> NPDES permits expire every 5 years. The Regional Boards generally update their general NPDES permits within this time frame, but, in some instances, they have administratively extended the expiration date on these permits. The last round of general NPDES permit renewal occurred in 2013 (with the previous round occurring between 2007 and 2009). For this reason, it is expected that many of these general permits which were renewed in 2013 will again be renewed, revised, or reissued on or around 2018.

<sup>xl</sup> [http://www.waterboards.ca.gov/northcoast/about\\_us/contact\\_us.shtml](http://www.waterboards.ca.gov/northcoast/about_us/contact_us.shtml) (accessed 3/8/2014).

<sup>xli</sup> This general NPDES permit is scheduled to expire on July 23, 2014.

<sup>xlii</sup> “Construction dewatering of water where sediment and naturally occurring parameters (e.g., naturally occurring metals or salts, temperature, pH, etc.) in area ground water are the only pollutants of concern. . . .” Order No. R1-2009-0045, § I.B.1.a.

<sup>xliii</sup> A low treat discharge must be: 1) from a planned activity; 2) from a point source; 3) from a definable project; and, 4) be short term, have a minimized volume, or both. The discharge must 1) require a minimal level of treatment; 2) implement BMPs to eliminate or reduce pollutants and minimize volume and discharge rates, or 3) both require minimum treatment and implementation of BMPs.

“A low threat discharge is defined as a planned, short-term and/or minimized volume discharge from a definable project that results in a point source discharge where the discharge requires a minimal level of treatment and/or is

controlled to eliminate or reduce pollutants and minimize volume and discharge rates through implementation of best management practices (BMPs)." North Coast Regional Water Quality Control Board, *General NPDES Permit No. CA0024902 Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region*, § I.A (Order No. R1-2009-0045; July 23, 2009).

<sup>xliv</sup> Annual fees depend on the threat to water quality ("1", "2", or "3"), the complexity of the discharge ("A", "B", or "C"), and whether the discharge is to land or a surface water or whether land disposal is utilized (Title 23 of the California Code of Regulations, Division 3, Chapter 9, Article 1). Many low threat discharges to land or surface waters are likely to be rated 3C, and thus, the annual fee is \$1,772 (current through 2/28/14; accessible through the California Office of Administrative Law, <http://www.oal.ca.gov/>). Note, however, that additional fees may apply. For example, Region 5's 2014 fee for a 3C discharge is \$1,940.

<sup>xlv</sup> The notice will indicate that a) the discharge is eligible for coverage and 30-day public notice period has started, b) coverage under the general permit will be considered at a regularly-scheduled hearing of the Regional Water Board, or c) the discharge is ineligible for coverage under the general permit and whether coverage may be obtained under an individual permit. Order No. R1-2009-0045, § II.B.

<sup>xlvi</sup> "a. No significant comments were received and coverage under this General Permit is granted; or b. Significant comments were received and coverage under this General Permit shall be considered at a regularly scheduled Regional Water Board hearing; or c. Significant comments were received and an individual permit is required for the discharge." Order No. R1-2009-0045, § II.B.3.

<sup>xlvii</sup> An exception may be granted if the four criteria listed in Section II.A.3. are met. Order No. R1-2009-0045, § II.A.3.

<sup>xlviii</sup> [http://www.waterboards.ca.gov/sanfranciscobay/about\\_us/contact\\_us.shtml](http://www.waterboards.ca.gov/sanfranciscobay/about_us/contact_us.shtml) (accessed 3/18/2014).

<sup>xlix</sup> California Regional Water Quality Control Board San Francisco Bay Region, *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)* (Incorporating all amendments approved by the Office of Administrative Law as of June 29, 2013).

<sup>i</sup> [http://www.waterboards.ca.gov/centralcoast/about\\_us/contact\\_us.shtml](http://www.waterboards.ca.gov/centralcoast/about_us/contact_us.shtml) (accessed 3/18/2014).

<sup>ii</sup> Applies to "Construction Dewatering for sites less than 1-acre and are not part of a larger common construction plan", where the flow is less than 0.1 million gallons per day and the duration is less than one year. *Draft Waste Discharge Requirements Order No. R3-2011-0223, National Pollutant Discharge Elimination System (NPDES) Permit No. CAG993001, General Permit for Discharges with Low Threat to Water Quality*, Findings, Item 6 (December 1, 2011).

<sup>iii</sup> Order No. R3-2011-0223, Findings, Item 5.

<sup>iiii</sup> Order No. R3-2011-0223, § I.A.b.8.

<sup>lv</sup> [http://www.waterboards.ca.gov/losangeles/about\\_us/contact\\_us/](http://www.waterboards.ca.gov/losangeles/about_us/contact_us/) (accessed March 21, 2014).

<sup>lv</sup> [http://www.waterboards.ca.gov/centralvalley/about\\_us/contact\\_us/](http://www.waterboards.ca.gov/centralvalley/about_us/contact_us/) (accessed March 9, 2014).

<sup>lvi</sup> *Id.*

<sup>lvii</sup> *Id.*

<sup>lviii</sup> As of early 2014, the filing fee is \$1,940. The fee typically changes around June 30 each year.

<sup>lix</sup> 22 Cal. Code Reg. § 66000 et seq.

<sup>lx</sup> <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Lawbook.aspx> (accessed April 1, 2014).

<sup>lxi</sup> North of Conway Summit, Mono County

<sup>lxii</sup> South of Conway Summit, Mono County

<sup>lxiii</sup> [http://www.waterboards.ca.gov/lahontan/about\\_us/contact\\_us.shtml](http://www.waterboards.ca.gov/lahontan/about_us/contact_us.shtml) (accessed March 21, 2014).

<sup>lxiv</sup> *Id.*

<sup>lxv</sup> State of California Regional Water Quality Control Board Lahontan Region, *Water Quality Control Plan for the Lahontan Region*, page 5.2.-2 (Plan effective March 31, 1995, amendments effective through 2005).

<sup>lxvi</sup> *Id.*, page 5.2-3.

<sup>lxvii</sup> "Discharge under this General Permit will only be authorized when land disposal is not a practical or feasible option based on information or evidence provided by the applicant within the NOI." California Regional Water Quality Control Board Lahontan Region, *Renewed Waste Discharge Requirements and National Pollutant Discharge Elimination System General Permit for Limited Threat Discharges to Surface Waters*, Findings § 8 (July 23, 2008). This same phrase is included in the *Tentative Renewed Waste Discharge Requirements and National Pollutant Discharge Elimination System General Permit for Limited Threat Discharges to Surface Waters* ("Tentative Order") (March 26, 2014).

<sup>lxviii</sup> Order No. R6T-2008-0023, Findings, § 11. The Tentative Order also includes this language.

<sup>lxix</sup> "It is not intended . . . to regulate discharges that contain industrial chemicals, chlorinated hydrocarbons, or organic

pollutants, herbicides, pesticides, oil and grease, radioactivity, salinity or any substance or physical property in significant quantities that may adversely affect beneficial uses or cause acute or chronic toxicity to aquatic life in the receiving waters for the discharge.” Order No. R6T-2008-0023, Findings, § 10. The Tentative Order also includes this language.

<sup>lxx</sup> In the Tentative Order, this is Attachment A.

<sup>lxxi</sup> In the Tentative Order, this procedure is changed and the discharger receives coverage under the permit if the Regional Board does not respond 30 days after the submittal of a complete NOI and supporting documentation.

<sup>lxxii</sup> In the Tentative Order, this is Attachment E (almost all other permits and WDR use Attachment E for the monitoring and reporting program).

<sup>lxxiii</sup> Discharges from construction dewatering to land are allowed as long as: 1. the discharge complies with the general NPDES permit; 2. the discharge is not prohibited by the basin plan; 3. contact with construction materials or equipment is prevented or minimized; and, 4. the discharge does not contain toxics. Order No. R6T-2011-0019, § III.B.

<sup>lxxiv</sup> SMARTS is available at <https://smarts.waterboards.ca.gov/>

<sup>lxxv</sup> These general WDRs are still applicable. They cover regulation of small construction activities mostly in areas where only waters of the state are present.

[http://www.waterboards.ca.gov/lahtontan/water\\_issues/available\\_documents/misc/general\\_permits4lahontan.pdf](http://www.waterboards.ca.gov/lahtontan/water_issues/available_documents/misc/general_permits4lahontan.pdf) (accessed April 25, 2014).

<sup>lxxvi</sup> A “construction activity that results in land disturbance of 10,000 square feet or more and is not covered under . . . Water Quality Order 99-08-DWQ” referencing the previous construction permit. This permit has been superseded by the 2009 Construction General Permit, Order No. 2009-0009-DWQ. The 2009 Construction General Permit applies to construction sites having land disturbance of greater than one acre.

<sup>lxxvii</sup> [http://www.waterboards.ca.gov/coloradoriver/about\\_us/contact\\_us.shtml](http://www.waterboards.ca.gov/coloradoriver/about_us/contact_us.shtml) (accessed March 18, 2014).

<sup>lxxviii</sup> “Dischargers of low threat wastewaters to surface waters, who have been enrolled for coverage to allow the discharge under an existing Statewide or Regional Water Board-wide permit as listed in Table 3 or an individual permit, are not required to apply for coverage . . .” Order No. R7-2009-0300, § I.B. The Construction General Permit is listed in Table 3 and thus, in Region 7, the Construction General Permit should be used to regulate the dewatering discharge.

<sup>lxxix</sup> For the permit to apply, the following must be true: 1) pollutant concentrations in the discharge must not cause or contribute to “an excursion above any applicable water quality objective”; 2) the discharge must meet screening levels (Attachment B of permit) or meet the effluent limitations contained within the permit; 3) no dilution; and, 4) the discharger must comply with all of the terms of the permit.

<sup>lxxx</sup> “**Dewatering Activities.** Entities discharging treated or untreated groundwater from . . . temporary dewatering operations to construct or protect pipelines and other structures from groundwater infiltration or flotation.” § I.A.2.

All low threat discharges must meet effluent limitations for total suspended solids, oil and grease, pH, total petroleum hydrocarbons, and total residual chlorine. Dischargers must also meet effluent limitations for the waterbody for which the discharge will occur.

<sup>lxxxi</sup> “Where no pollutants are discharged to surface or ground water, and the construction site is *less than one acre in size* [ ]” (emphasis added), Resolution No. R7-2003-0008, Attachment A, Item 8.

<sup>lxxxii</sup> [http://www.waterboards.ca.gov/santaana/about\\_us/contact\\_us.shtml](http://www.waterboards.ca.gov/santaana/about_us/contact_us.shtml) (accessed March 20, 2014).

<sup>lxxxiii</sup> The permit expired on March 1, 2014, but has been administratively extended until the permit renewal is complete. Renewal may occur sometime later in 2014.

<sup>lxxxiv</sup> “All wastewater discharged in a manner so that it will percolate into the ground before reaching surface waters . . .” Santa Ana Regional Water Quality Control Board, *Resolution No. R8-2013-0015 Waiver of Waste Discharge Requirements for Specific Types of Discharges*, Attachment A (March 22, 2013).

<sup>lxxxv</sup> Cal. Water Code § 13050.

<sup>lxxxvi</sup> [http://www.waterboards.ca.gov/sandiego/about\\_us/contact\\_us/](http://www.waterboards.ca.gov/sandiego/about_us/contact_us/) (accessed March 20, 2014).

<sup>lxxxvii</sup> This waiver expired on February 3, 2014. As required by Cal. Water Code § 13269 all waivers must be reviewed every 5 years. As a result of that review, a waiver must be renewed or terminated. For a project that received coverage under the waiver in the past, the project can continue to receive coverage under the waiver at the discretion of the Regional Board’s executive director. The waiver is in the process of being renewed. Until it has been renewed, new dischargers must get permit coverage under one of the two general NPDES permits which cover dewatering (R9-2007-0034 and R9-2008-0002) or under a site-specific NPDES permit. Phone conversation between Roger Mitchell and

Brad Dickson (May 8, 2014).

<sup>lxxxviii</sup> “Do not discharge stormwater or nonstorm water that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface.” Caltrans, *2010 Standard Specifications*, § 13-4.03G.

<sup>lxxxix</sup> Vendor quotes were collected for the year 2001. These costs were escalated to 2014 values using a factor of approximately 1.55.

<sup>xc</sup> Caltrans, *Construction Site Best Management Practices Manual*, Sediment Trap SC-3, page 1 (March 1, 2003).

<sup>xci</sup> “This Order does not regulate discharges from the Department’s construction activities, *including dewatering effluent discharges* from construction projects” (emphasis added). Caltrans Permit, Findings, § 9.

<sup>xcii</sup> Caltrans MS4 Permit, Findings, § 9.

<sup>xciii</sup> U.S. EPA, Office of Communications, Education, and Public Affairs, *Terms of Environment* (December 1997).

<sup>xciv</sup> As of April 21, 2014, the federal definition of “Waters of the United States” was being revised. U.S. Army Corps, EPA, *Definition of the “Waters of the United States” under the Clean Water Act; Proposed Rule*, 79 Fed. Reg. 22188 (April 21, 2014).