

District Construction Stormwater Coordinators (DCSWC) Manual

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List of Abbreviations

AC	asphalt concrete
ADL	aerially deposited lead
APCD	Air Pollution Control District
AQMD	Air Quality Management District
ASBS	Areas of Special Biological Significance
ATS	Active Treatment System
BMP	Best Management Practice
CFWS	California Fish and Wildlife Service
Caltrans	State of California, Department of Transportation
CCEP	Construction Compliance Evaluation Plan
CCO	Contract Change Order
CEM	Construction Engineering and Management forms
CERCLA	Comprehensive Environmental Response and Compensation and Liability Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
COI	Change of Information
Corps	U.S. Army Corps of Engineers
CCEP	Construction Compliance Evaluation Plan
CPB	Construction Program Procedure Bulletin
CPD	Construction Program Directive
CSWC	Construction Stormwater Coordinator
CWA	Clean Water Act
CSWAT	Construction Stormwater Advisory Team
DEA	Division of Environmental Analysis
DFG	California Department of Fish and Game
DTSC	California Department of Toxic Substances Control
DCSWC	District Construction Stormwater Coordinator
DWQ	Division of Water Quality
DWP	District Work Plans
DSA	disturbed soil area
ERP	Enforcement Response Plan
EPA	Environmental Protection Agency
ESA	environmentally sensitive area
gpd	gallons per day
IC/ID	Illegal Connection/Illicit Discharge
IRF	Incident Report Form

IQA	Independent Quality Accurance
IH	Independent Quality Assurance Informational Handout
IGP	Industrial General Permit
LTCGP	Lake Tahoe Construction General Permit
LRP	Legally Responsible Person
MO	Measurable Objective
MOU	memorandum of understanding
MS4	Municipal Separate Storm Sewer System
NOAA	National Oceanic and Atmospheric Administration
NAL	Numeric Action Level
NEL	Numeric Effluent Limitations
NOI	Notice of Intent
NOT	Notice of Termination
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NSWD	Non-Stormwater Discharge
NTC	Notice to Comply
NWS	National Weather Service
PA/ED	Project Approval/Environmental Document
PECE	Plant Establishment
PID	Project Initiation Document
PDT	Project Development Team
PPDG	Project Planning and Design Guide
PRDs	Project Registration Documents
PR	Project Report
PSR	Project Study Report
QA	Quality Assurance
QRE	Qualifying Rain Event
QSD	Qualified Stormwater Pollution Prevention Plan Developer
QSP	Qualified Stormwater Pollution Prevention Plan Practitioner
REAP	Rain Event Action Plan
RE	Resident Engineer
RL	Risk Level
RWQCB	Regional Water Quality Control Board
ROW	Right-Of-Way
SAP	Sampling and Analysis Plans



SOGC	Statement of Going Contracts
SSP	Standard Special Provision
SWAT	Stormwater Advisory Team
SWC	Stormwater Coordinator
SWDR	Stormwater Data Report
SWMC	Stormwater Management Committee
SWMP	Stormwater Management Plan
SMARTS	Stormwater Multiple Application and Report Tracking System
SWP	Stormwater Program
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
TPH	total petroleum hydrocarbons
USGS	United States Geological Survey
WDID	Waste Discharger Identification Number
WDRs	Waste Discharge Requirements
WPCD	Water Pollution Control Drawing
WPCP	Water Pollution Control Program



Section 1 Introduction

This District Construction Stormwater Coordinators Manual (Manual) summarizes the responsibilities of the District Construction Stormwater Coordinator (DCSWC) as defined in the Caltrans Construction Manual (Construction Manual) and the Caltrans Statewide Stormwater Management Plan (SWMP) and as identified by Headquarters and district construction staff throughout the state.

This Manual is intended primarily for the designated DCSWC in accordance with the Construction Manual Section 7-104B which requires every district construction to have at least one designated DCSWC who will carry out necessary administrative functions to prevent water pollution. Most districts have assigned staff to assist the DCSWC in executing the designated tasks as outlined in this Manual.

The Manual also provides a list of referenced forms with their hyperlinks, useful samples of working documents, and suggestions for the DCSWC to facilitate the implementation of the statewide and district-specific responsibilities for water pollution control.

Throughout the Manual, the permits referred to are defined as follows:

Caltrans National Pollutant Discharge Elimination System (NPDES) Permit

 NPDES Statewide Storm Water Permit Waste Discharge Requirements (WDRs) for State of California Department Of Transportation (Caltrans), NPDES No. CAS00003, Order 2012-0011-DWQ, as amended by the following Orders: Water Quality <u>Order 2014-0006-EXEC</u> (ASBS Final Compliance Plan Approved April 7, 2015) and Water Quality <u>Order 2014-0077-DWQ</u> (TMDL requirements effective on May 20, 2014), and Water Quality <u>Order 2015-0036-EXEC</u> (Amending ASBS Priority Discharge Locations)

Construction General Permit (CGP)

 NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP) (Order No 2009-0009-DWQ, NPDES No. CAS000002) as modified by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ

Lake Tahoe Construction General Permit (LTCGP)

 Construction General Permit for the Lake Tahoe Hydrologic Unit (LTCGP) Order No. R6T-2016-0010 NPDES No. CAG616002, General Waste Discharge Requirements and National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit, Counties of Alpine, El Dorado, and Placer

Industrial General Permit (IGP)

The Statewide Permit for Stormwater Discharges Associated with Industrial Activities (IGP) (Order 2014-0057-DWQ) regulates nine broad categories of industrial activities. There are certain activities that might occur ancillary to construction projects (such as batch or crushing plants), for those operations, the industrial permit is triggered. Section 13-1.01C (3) Contractor-Support Facilities and 13-1.01D (2) Regulatory Requirements of the 2015 Standard Specification outline the general requirements for industrial facilities, which include the preparation and implementation of an Industrial SWPPP.



Dewatering Permit

Dewatering discharge requirements vary among the nine regional boards. Section 4.6 presents the different Regional Water Quality Control Board (RWQCB) permits that should be consulted to determine if there are any discharge requirements that apply for the proposed dewatering operation. The Dewatering Manual should also be referred to determine appropriate requirements for the individual construction site. The Manual can be accessed at http://www.dot.ca.gov/hq/construc/stormwater/field-guide-to-construction-site-dewatering.pdf.

In addition, there are other NPDES permits that might be applicable to construction operations within Caltrans right-of-way (ROW), either as part of a Caltrans project or one being done by others but accessing Caltrans ROW (oversight or via the Encroachment Permit process).

In California, US EPA has delegated its authority to issue and enforce NPDES permits to the State Water Resources Control Board (SWRCB). The State Board has nine RWQCBs across the State. Figure 1-1 presents a depiction of the nine regional board boundaries in relation to the 12 Caltrans districts.









Section 2 Roles and Responsibilities

The function of the DCSWC within the overall organization of the Caltrans Construction Stormwater Program is identified in Figure 2-1 below (reproduced from Figure 2-4 of the 2016 Caltrans SWMP). This section summarizes the roles and responsibilities of Headquarters and district level functions as defined in applicable Caltrans statewide and district documents.



Figure 2-1. Caltrans Stormwater Program Functional Organization

2.1 Construction Manual Requirements

Section 7-104B(I) of the Construction Manual requires that each district designate a DCSWC to facilitate implementation of the Project Development Stormwater Management Program. As such, the primary role of the DCSWC is to perform the necessary administrative functions to prevent water pollution. In this capacity, the DCSWC interacts with other personnel in other district-level functional units, provides assistance to Resident Engineers (REs), Deputy District Director, Construction Manager, and Construction Engineer, and ensures that field construction personnel are appropriately trained to verify compliance with water pollution control requirements.



2.2 SWMP Requirements

Section 2.2.7.2 of the SWMP defines the role of the DCSWCs as

- Implement administrative functions to assist REs
- A resource that helps interpret guidance manuals, policies, specifications, permits, and other information that impacts water pollution prevention related decisions
- Assists in the review of water pollution control documents
- Identifies the training needs of district construction staff
- Administers technical expertise resources
- Coordinates with other Caltrans stormwater personnel (e.g., District NPDES Coordinator) within the district or Headquarters
- Actively participates in the Construction Stormwater Advisory Team (SWAT)

In addition, the DCSWC is charged with actively participating in the review of construction stormwater related Manuals, procedures, training, and other guidance led by Headquarters.

2.3 District Work Plan Requirements

Each District has its own roles and responsibilities for the DCSWC, as defined in the Caltrans District Work Plan (DWP). DWPs are available on the Caltrans Internet website available at http://www.dot.ca.gov/hg/env/stormwater/annual_report/index.htm#workplans.

Some roles and responsibilities defined in the DWPs are the same as those identified in the SWMP. Other DWPs provide additional detail about the roles and responsibilities of the DCSWC. These roles and responsibilities include:

- Review of the contractor's Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP).
- Visit construction projects.
- Act as technical advisor to the RE.
- Evaluate projects for potential threats to water quality and the effectiveness of stormwater contract administration.
- Work with other functional areas in the District.
- Assist REs to ensure compliance.
- Ensure that field construction personnel are appropriately trained.

2.4 Headquarters Division of Construction

Headquarters Division of Construction Stormwater Program responsibilities for stormwater management are described in Section 2.2.7.2 of the SWMP. Staff at the Construction Division Program level provide program coordination, evaluation, and reporting.

In conjunction with the Division of Environmental Analysis (DEA), the Division of Construction Stormwater Program provides general guidance to Construction Divisions in the districts for implementing construction site Best Management Practices (BMPs) and for the review of SWPPPs and WPCPs.

The Construction Division Program assesses the district's implementation of stormwater BMPs for managing the stormwater discharges associated with Caltrans construction projects. The Construction Division Program assists the Water Quality Program in the preparation of the Annual Report to the State Water Resources Control Board (SWRCB) as it relates to construction activities.



- Developing policies and specifications
- Providing technical support
- Processing evaluations
- Conducting the Construction SWAT meetings
- Participating in Project Design, Water Quality, Encroachment Permit, and Maintenance SWATs
- Developing guides, manuals, and other publications
- Negotiating permits
- Evaluating and developing BMPs
- Supporting contract administration
- Acting as liaison to Caltrans Legal
- Acting as liaison to Landscape Architecture and Design
- Annual reporting
- Managing consultant contracts
- Supporting response and compliance requirements regarding Notices of Violation (NOVs) and other RWQCB sanctions
- Supporting legislative review

2.5 District NPDES Coordinator

The District Stormwater Coordinator (SWC), also referred to as the District NPDES Coordinator or the NPDES Branch chief, is the highest district-level stormwater function identified in the Stormwater Functional Organization (Figure 2-1).

Each district designates a District NPDES Coordinator to serve as the liaison between the district and DEA. Liaison activities include conducting meetings related to stormwater management issues with the coordinators from each Caltrans functional unit and with other Municipal Separate Storm Sewer System (MS4) permittees to discuss problems and concerns. Liaison activities also include regular communications with representatives of the RWQCB.

In addition, the District NPDES Coordinator has the following responsibilities:

- Serving as the point of contact for regulatory inquiries regarding implementation of the SWMP.
- Receiving and responding to public inquires made to the district regarding stormwater management issues.
- Coordinating, tracking, and reporting the district's response to IC/ID incidents and non-permitted nonstormwater discharges. Instances of IC/IDs discovered by Construction field staff must be reported to the District NPDES Coordinator. The District NPDES Coordinator will coordinate with other Caltrans Department functional units as necessary to correct or eliminate the IC/ID.
- Reporting instances of non-compliance to the RWQCBs, unless other staff such as the DCSWC is given that responsibility as indicated in the DWP.
- Overseeing the data input in the stormwater portal for the Caltrans Stormwater Management Program Annual Report.

A key responsibility of the DCSWC is to coordinate with the District NPDES Coordinator for various stormwater activities. The DCSWC should also notify the District NPDES Coordinator of events on construction projects that require reporting to the RWQCB. At a minimum, the DCSWC must notify the



District NPDES Coordinator if any of the following events occur on construction projects within the district:

- IC/ID incidents
- NALs/NELs exceedances
- Notice of Discharge
- Other matters that require communication with the RWQCB

The DCSWC is the focal point of contact for stormwater issues during the construction phase. They are to coordinate and seek any assistance from the District NPDES Coordinator in responding to request from REs or from the RWQCB. This coordination can vary by districts. Some districts might have the DCSWC take the lead in coordinating and submitting documents directly to the RWQCB.

2.6 District Stormwater Teams

Typically, each district designates personnel as members of a "Stormwater Team" to address water pollution control within the district. The DCSWC generally has a key role as a member of the team, although the actual organization of the team differs from district to district as described in the DWP. The DCSWC responsibilities may be modified depending on the District needs.

2.6.1 DCWSC

The DCSWC is often the designated team leader for district construction water pollution control depending on the needs of the district. As the team leader, the DCSWC coordinates all issues that involve overall compliance within the district for stormwater pollution prevention on construction sites. A significant percentage of that role is administrative, involving paperwork and other office-related tasks. Typical tasks of a team leader include:

- Scheduling Construction Stormwater Coordinator (CSWC) staff field reviews
- Tracking projects and managing databases
- Attending or scheduling CSWC staff to attend pre-construction meetings
- Reviewing all SWPPP documents
- Reviewing WPCPs on request
- Corresponding with the RWQCB, in coordination with the District NPDES Coordinator, regarding Notice of Termination (NOT), discharge notices, and other regulatory issues
- · Coordinating and tracking stormwater training of construction staff
- Presenting water pollution control compliance information to management
- Assisting with preparation of status reports and Annual Reports
- Consulting with Senior Construction Engineers and REs regarding Contract Change Orders (CCOs) and payment issues regarding water pollution control
- Tracking annual compliance certifications and Construction Annual Reports (SWPPP Projects)
- Submitting SWPPPs or WPCPs to the RWQCB as requested
- Preparing guidelines for staff
- Drafting stormwater related construction policy for management review
- Submitting rain alerts and severe weather warnings
- · Attending, or scheduling staff to attend, compliance inspections



The DCSWC supervises the activities of subordinate CSWC personnel. However, as a member of the team, the DCSWC may also perform the role of subordinate personnel, as described in the following sections.

2.6.2 Subordinate Staff

The CSWC staff should focus on day-to-day issues on individual construction projects, with CSWC field personnel spending the majority of their time supporting Construction staff. Typically, CSWC field personnel are assigned to geographical areas in which they conduct compliance inspections and technical on-call assistance to project staff. Their responsibilities include:

- Reviewing all SWPPP projects and visiting at a minimum once a month
- Inspecting WPCP projects at a minimum once every six weeks
- Preparing inspection reports
- Submitting reports to the RE, DCSWC, and other appropriate project staff
- Escorting Independent Quality Assurance (IQA) compliance inspectors on site visits. This would count as a review/inspection by either the DCSWC or CSWC staff. Conducting final close-out inspections of projects to verify that final stabilization requirements have been met and that temporary BMPs, trash and debris have been removed as required, including the items agreed upon by the RE and Maintenance Superintendent or Supervisor, or the District Maintenance SWC and recorded on Form MTCE-0023, "Construction to Maintenance 90 percent BMP Completion Walkthrough."

2.6.3 Resident Engineer

One responsibility of the DCSWC is to assist REs to ensure water pollution control compliance on their projects. The RE is the Caltrans representative charged with administering construction contracts and is responsible for ensuring that stormwater controls are implemented on construction sites. The RE makes decisions regarding the 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 take appropriate actions specified in the contract to correct deficiencies.

The RE reviews the project WPCP or SWPPP and indicates to the contractor any required changes. The RE must authorize the WPCP or SWPPP prior to the commencement of soil- disturbing activities. Amendments to the WPCP or SWPPP must also be authorized by the RE.

The RE must inspect the construction site for proper installation and maintenance of BMPs and overall implementation of the authorized SWPPP or WPCP. The RE ensures that the contractor conducts and documents stormwater inspections as required in the contract, particularly that the documentation reflects site conditions and that site conditions are akin to what is included in the latest SWPPP. The RE is responsible for ensuring that the annual certification of compliance for SWPPP or WPCP projects is completed.

Additional water pollution control duties of the RE include:

- Maintaining SWPPP or WPCP documentation
- Inspecting for and reporting IC/ID incidents
- Under certain circumstances, directing the cleanup and/or removal of illegally dumped material, spills
 or discharges through illicit connections within the limits of the construction site
- Forwarding Notices of Discharge (CEM-2061) to the DCSWC (for assistance reviewing it) or to the District NPDES Coordinator.
- Ensuring required visual inspections for water pollution are conducted per Section 13 of the special provisions and that inspections reflect actual site conditions.



- Ensuring RL2 and RL3 SWPPP projects conduct required sampling and timely reporting and correct any NAL exceedances if they occur.
- Uploading required CGP inputs into SWRCB Stormwater Multiple Application and Report Tracking System (SMARTS) according to CPB 12-2.
- The RE is responsible for ensuring that stormwater BMPs are implemented, inspected, and maintained as specified in the authorized SWPPP or WPCP and in compliance with the standard specification and other contract documents.

2.7 Stormwater Advisory Teams

Caltrans has established Stormwater Advisory Teams (SWATs) to provide statewide input for the evaluation of new and improved BMPs and to develop procedures and guidance for implementing the SWMP. For Construction, the SWAT is composed of DCSWCs and representatives from the Construction Program. Construction SWAT meetings and activities are coordinated by the Headquarters Construction Division SWC. The Headquarters Construction Division SWCs are also part of the SWATs for Project Design, Water Quality, Encroachment Permit, and Maintenance.

The Construction SWAT generally meets quarterly to discuss updates to the stormwater program, provide status reports, communicate new technology, and discuss water pollution control issues and Statewide Policy Review and Development.

2.7.1 Construction Program Policy Bulletins

Caltrans Headquarters Construction Program distributes Construction Program Policy Bulletins (CPBs). These bulletins address changes in the Division of Construction policy(s) in regard to Construction issues, including stormwater pollution prevention. These bulletins are available on the Caltrans Construction website at: http://www.dot.ca.gov/hq/construc/manual2001/CPBindex.HTM. This website contains links to the signed documents (CPBs) until the time that they are incorporated into the Construction Manual through the Manual Change Transmittal process. At that time, the link directs the user to the chapter and section of the Construction Manual in which the policy is presented.

2.7.2 Construction Procedure Directives

Caltrans Headquarters Construction Program distributes Construction Procedure Directives (CPDs) internally to its staff. As name indicates these signed documents are about changes in procedures. CPDs are posted at the following address: <u>http://www.dot.ca.gov/hq/construc/CPDirectives/cpdindex.htm</u>

2.7.3 Standard Specifications

Water Pollution Control specifications are included in Section 13 of the 2015 Caltrans Standard Specifications. All six BMP categories include specific standard language as shown in Table 1 below. Non-standard specifications might be required based on project scope or site constrains, those are developed by the Project Engineer and will be included in the contract special provisions.

There might be some projects that are being constructed per the 2010 standard specifications, the table below will be different for those projects, although the 2010 specifications include most of the items below.

Table 2-1. Section 13 Water Pollution Control 2015 Standard Specifications	
Standard Specification Section Number Name	
13	WATER POLLUTION CONTROL



Table 2-1. Section 13 Water Pollution Control 2015 Standard Specifications		
Standard Specification Section Number	Name	
13-1.01A	Summary	
13-1.01B	Definitions	
13-1.01C	Submittals	
13-1.01C(1)	General	
13-1.01C(2)	Training Records	
13-1.01C(3)	Contractor-Support Facilities	
13-1.01C(4)	Water Quality Monitoring	
13-1.01D(4)	Water Pollution Control Manager	
13-1.01D(5)(b)	Water Quality Sampling and Analysis	
13-1.03	CONSTRUCTION	
13-1.03B	Contractor-Support Facilities	
13-2	WATER POLLUTION CONTROL PROGRAM	
13-3	STORMWATER POLLUTION PREVENTION PLAN	
13-3.01C(2)(b)	Construction Site Monitoring Program	
13-3.01C(2)(b)(ii)	Site Inspection Reports	
13-3.01C(2)(b)(iii)	Visual Monitoring Reports	
13-3.01C(2)(b)(iv)	Sampling and Analysis Plan	
13-3.01C(2)(b)(v)	Sampling and Analysis Plan for Nonvisible Pollutants	
13-3.01C(2)(b)(vi)	Sampling and Analysis Reports	
13-3.01C(2)(b)(vi)(B)	Numeric Action Level Exceedance Reports	
13-3.01C(2)(b)(vi)(C)	Receiving-Water Monitoring Trigger Reports	
13-3.01C(3)	Rain Event Action Plan	
13-3.01C(4)	Stormwater Annual Report	
13-3.01C(5)	Annual Certification	
13-3.01D(2)	Regulatory Requirements	
13-3.01D(3)	Water Quality	
13-3.01D(3)(b)	Numeric Action Levels	
13-3.01D(3)(c)	Receiving-Water Monitoring Triggers	
13-3.01D(3)(d)	Numeric Effluent Limitations	
13-4	JOB SITE MANAGEMENT	
13-4.03B	Spill Prevention and Control	
13-4.03B(2)	Minor Spills	
13-4.03B(3)	Semi-significant Spills	
13-4.03B(4)	Significant or Hazardous Spills	
13-4.03C	Material Management	
13-4.03C(2)	Material Storage	



Table 2-1. Section	13 Water Pollution Control 2015 Standard Specifications
Standard Specification Section Number	Name
13-4.03C(3)	Stockpile Management
13-4.03D	Waste Management
13-4.03D(2)	Paint Waste
13-4.03D(3)	Concrete Waste
13-4.03D(4)	Sanitary and Septic Waste
13-4.03D(5)	Liquid Waste
13-4.03E	Non stormwater Management
13-4.03E(2)	Illicit Connection and Illegal Discharge Detection and Reporting
13-4.03E(3)	Vehicle and Equipment Cleaning
13-4.03E(4)	Vehicle and Equipment Fueling and Maintenance
13-4.03E(5)	Material and Equipment Used Over Water
13-4.03E(6)	Structure Removal Over or Adjacent to Water
13-4.03E(7)	Paving, Sealing, Saw Cutting, Grooving, and Grinding Activities
13-4.03E(8)	Thermoplastic Striping and Pavement Markers
13-4.03E(9)	Pile Driving
13-4.03E(10)	Concrete Curing
13-4.03E(11)	Concrete Finishing
13-4.03F	Sweeping
13-4.03G	Dewatering
13-5	TEMPORARY SOIL STABILIZATION
13-5.02B	Erosion Control Blankets
13-5.02C	Mulch
13-5.02D	Cementitious Binder
13-5.02E	Soil Binder
13-5.02F	Temporary Covers
13-5.02G	Gravel-Filled Bags
13-5.03	CONSTRUCTION
13-5.03B	Temporary Erosion Control Blankets
13-5.03C	Temporary Mulch
13-5.03D	Temporary Hydraulic Mulch
13-5.03E	Temporary Bonded Fiber Matrix Hydraulic Mulch
13-5.03G	Temporary Cementitious Binder Hydraulic Mulch
13-5.03H	Temporary Tacked Straw
13-5.031	Temporary Hydroseed
13-5.03J	Temporary Soil Binder
13-5.03K	Temporary Covers



Table 2-1. Section 13 Water Pollution Control 2015 Standard Specifications		
Standard Specification Section Number	Name	
13-6	TEMPORARY SEDIMENT CONTROL	
13-6.02B	Rigid Plastic Barriers	
13-6.02C	Sediment Filter Bags	
13-6.03B	Temporary Check Dams	
13-6.03C	Temporary Drainage Inlet Protection	
13-6.03E	Temporary Fiber Rolls	
13-6.03F	Temporary Gravel Bag Berms	
13-6.03F	Rigid Plastic Barriers	
13-7	TEMPORARY TRACKING CONTROL	
13-7.02	STREET SWEEPING	
13-7.03	TEMPORARY CONSTRUCTION ROADWAYS AND ENTRANCES	
13-8	TEMPORARY ACTIVE TREATMENT SYSTEM	
13-8.01C(2)	Active Treatment System Plan	
13-8.01C(3)	Inspection Reports	
13-8.01C(4)	Notice of Discharge Reports	
13-8.01C(5)	Numeric Effluent Limitation Violation Reports	
13-8.01D(2)	Regulatory Requirements	
13-8.01D(3)	Training	
13-8.01D(4)	Equipment Calibration	
13-8.01D(5)	Quality Control	
13-8.02B	Treatment System	
13-8.02C	Collection and Conveyance System	
13-8.02D	Monitoring Equipment	
13-8.03B	Monitoring	
13-8.03B(2)	Corrective Measures	
13-9.02B	Temporary Concrete Washout Facilities	
13-9.02C	Portable Temporary Concrete Washouts	
13-9.02D	Temporary Concrete Washout Bins	
13.10	TEMPORARY LINEAR SEDIMENT BARRIERS	
13-10.02B	Fiber Rolls	
13-10.02H	Straw Bales	
13-10.021	Foam Barriers	
13-10.02J	Gravel-filled Bags	
13-10.03B	Temporary Fiber Rolls	
13-10.03C	Temporary Gravel Bag Berms	
13-10.03D	Temporary Large Sediment Barriers	



Table 2-1. Section 13 Water Pollution Control 2015 Standard Specifications	
Standard Specification Section Number Name	
13-10.03E	Temporary Reinforced Silt Fences
13-10.03F	Temporary Silt Fences
13-10.03G	Temporary Straw Bale Barriers
13-10.03H	Temporary Foam Barriers
13-10.031	Temporary Earthen Berms

Standard specifications sections 14 (Environmental Stewardship) and section 21 (Erosion Control) also include relevant specifications directly related to proper water pollution control/BMPs.

2.7.4 Stormwater Quality Handbooks

The Caltrans Stormwater Quality Handbooks consist of several manuals, as noted in Table 2-2 below.

Table 2-2. Caltrans Stormwater Guidance Manuals		
Document	Purpose	
Project Planning and Design Guide (PPDG)	Guides project planning staff in preparing and selecting appropriate Best Management Practices for inclusion into Contract Plans. Includes step-by-step guidance for documenting the selection and implementation of BMPs.	
Link: http://www.dot.ca.gov/design/hsd/inde	<u>x.html</u>	
Construction Site Best Management Practices (CS BMP) Manual	Describes the available BMPs that should be implemented in the field for construction projects (including encroachment permits). The Manual includes BMPs covering all six categories, soil stabilization, sediment control, wind erosion, tracking controls, non-stormwater management and waste management and materials pollution controls.	
Link: http://www.dot.ca.gov/hq/construc/sto	rmwater/CSBMP-May-2017-Final.pdf	
Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual	Guides contractors and Caltrans staff through the process of preparing a SWPPP and WPCP. This manual provides detailed step-by-step procedures, instructions, sample text and a template that contractors must use to prepare the SWPPP/WPCP. Templates conform to CGP requirements based on Risk Level, LTCGP requirements including deviations from CGP language, and Caltrans requirements for preparing WPCPs.	

The SWPPP/WPCP Preparation Manual and the CS BMP Manual are used for the development, review, and approval of construction project SWPPPs and WPCPs and any amendments.

There are other Manuals that can be used by the DCSWC to ensure specific stormwater requirements are adhered to, including but not limited to:

Table 2-3. Relevant Caltrans Stormwater Documents, Manuals, and their Purpose		
Document	Purpose	
Construction Site Monitoring Program Guidance Manual	This manual presents guidance for Caltrans staff and contractors to use in the planning and implementation of stormwater monitoring programs at construction sites. Describes and provides guidance on developing Sampling and Analysis Plans, standard operating procedures for pH and turbidity sampling and other requirements of the CGP and LTCGP. This is also relevant for projects where non-visible sampling is triggered.	

Link: http://www.dot.ca.gov/hq/construc/stormwater/caltrans_guidance_manual-rev1.pdf



altrans Stormwater Documents, Manuals, and their Purpose	
Link to the access-based SWPPP and WPCP templates to prepare by QSD/QSP prior to the start of construction.	
rmwater/	
The purpose of this Dewatering Guide is to inform and guide intended users in selecting implementing, and monitoring construction site dewatering operations.	
rmwater/field-guide-to-construction-site-dewatering.pdf	
The Manual includes instructions on how to fill out PRDs and other documents required for projects subject to the CGP. Screenshots and step by instructions are provided for every main	
rmwater/documents/SMARTS_Manual.pdf	
Describes the method established and approved by Headquarters Office of Hydraulics and Stormwater Design (OHSD) for the prediction of erosion rates before, during, and after construction of Caltrans projects to meet the erosion and sediment control requirements identified in the Caltrans NPDES Permit and CGP.	

2.7.5 Caltrans Construction Manual

The Construction Manual is a resource that provides guidance for all personnel engaged in contract administration. The manual compiles established Caltrans policies and procedures for staff for the construction phase of Caltrans projects and is a supplement to engineering experience and judgment, as well as personnel training and development. Section 7 of the Construction Manual addresses water pollution control (specifically 7-104B Water Pollution Control). It describes the roles and responsibilities of the DCSWC, RE, inspectors including SWPPP inspectors, and contractor for water pollution control. It is not a contract document and is not binding for the contractor, so it must never be used as a substitute or supplement to the Standard Specifications, Standard Special Provisions (SSPs), and other contract requirements. The manual is available on the Caltrans website and was last updated July 2017.

2.7.6 Modifications to the NPDES Permits

Occasionally, the SWRCB or RWQCBs promulgate modifications to statewide and regional NPDES permits during their effective period. Caltrans must comply with these modifications. The most recent modification was to the CGP to add sampling and analysis requirements for certain construction projects, as described in Section 4.2.

In addition, the SWRCB website also posts CGP Permit Review Technical Bulletins available on the SWRCB website, since the 2012 CGP renewal, 3 issues have been prepared and posted. They are available at:

https://www.waterboards.ca.gov/water_issues/programs/stormwater/const_permit_faqs.shtml

- <u>Issue # 1 (2012)</u>
- Issue # 2 (2014)
- Issue #3 (2016)

2.7.7 Training

Caltrans statewide training programs related to water pollution control are described in Section 4.4 of this Manual.



2.7.8 District RE Meetings

Meetings are held annually for all REs in a district. A variety of topics are addressed, including water pollution control. The DCSWC should use these meetings as a platform for presenting any new developments or district-wide issues regarding stormwater pollution prevention to the large audience of REs. Some districts also hold 2 to 4-hour mini-RE meetings to discuss timely issues that are of concern to the RE where water pollution control is often one of the topics.



Section 3 Project Progression

The DCSWC responsibilities begin before construction starts at a project site. They may include review of proposed temporary BMPs at early design phases (PID or PA/ED), constructability reviews, review of Stormwater Data Report (SWDR) Construction Site (CS) checklists CS-1 Part 1-6, and Plans, Specifications, and Estimates (PS&Es). The DCSWC reviews planning and development documents for stormwater pollution prevention compliance issues such as:

- Project Study Reports/Project Reports PSRs/PRs should include preliminary cost estimates for water pollution controls and verbiage for compliance with the NPDES permits.
- At the PS&E stage, the DCSWC should review the cost estimates, water pollution control contract special provisions, and plans for temporary and permanent BMPs.

3.1 Project Tracking

DCSWCs use various methods to track projects. A starting point is to use the Caltrans construction contract awards website to identify all active projects in the district. To complete the list of projects, the DCSWC must add the encroachment permit projects that are assigned to Construction for oversight.

The DCSWC should track the items listed in Table 3-1 for each project to assist in the document gathering for the Caltrans Annual Report or to assist the RE in the review of contract specific CGP or LTCGP Annual Report.

Table 3-1. Items tracked for Caltrans or CGP/LTCGP Annual Reports		
Item Tracked	CGP Annual Report	Caltrans Annual Report
Date the Notice of Intent (NOI) was filed via SMARTS and WDID issued	X	Х
Date an invitation to a pre-construction meeting was sent to RWQCB		x
Construction dates (start and completion)	X	Х
Number of Rain Event Action Plans (REAPs)	x	
Number of Qualifying Rain Events (QREs) for Risk Level 2 and 3/LTCGP SWPPP Projects	x	
Sampling data submitted via adhoc to SMARTS	X	
Monitoring documentation for non-visually detectable pollutants	X	
Contractor inspection reports, particularly CEM-2035/CEM-2035T Stormwater Corrective Actions Summary	х	
Deficiencies found through CCEP/ IQA inspection	X	x
Dates of RWQCB inspection and enforcement actions such as NTCs, NOVs, etc.		Х
Dates notices of discharge/NAL/NELs were uploaded to SMARTS	X- ad hoc reporting required	x
Contractor training	X	
Date NOT is submitted to RWQCB via SMARTS	X	X



The data for all projects will be stored on the Caltrans Portal (see Section 5.3) entered by either the DCSWC or the District NPDES Coordinator depending on the DWP responsibilities.

3.2 Stormwater Multiple Application and Report Tracking System

The SWRCB has created SMARTS, a database that requires all projects subject to the CGP or the LTCGP to have the site-specific SWPPP, Notice of Intent (NOI), and other Permit Registration Documents (PRDs) uploaded before any soil disturbance occurs. SMARTS require that the Legally Responsible Person (LRP) ensure that not only appropriate documentation is prepared but that the required monitoring documentation is uploaded. SMARTS uploading requirements apply before any soil disturbance occurs (NOI is processed and a Waste Discharger Identification Number (WDID) is issued) and ends when the applicable RWQCB has approved the NOT to cease CGP/LTCGP coverage.

3.3 Notice of Intent

Caltrans is required to electronically file PRDs for coverage under the CGP or LTCGP. PRD's consist of: NOI, Risk Assessment, Site Map, SWPPP, Signed Certification Statement, and Annual Fee.

Part of the NOI tab in SMARTS is the calculation of the project risk level. The risk level of a project is determined by the combination of calculated project sediment risk and receiving water risk.

- sediment risk determination is defined as the relative amount of sediment that can be discharged, given project duration and location details.
- receiving water risk is determined by assessing the risk sediment discharges pose to receiving waters.

Refer to the Caltrans Project Risk Level Determination Guidance document at the following web page for information on determining the project risk level: <u>http://www.dot.ca.gov/hq/oppd/stormwtr/risk-guidance.htm.</u>

The Risk Level general requirements are as follows:

Risk Level 1 projects are subject to minimum BMP and visual monitoring requirements.

Risk Level 2 projects are subject to minimum BMPs, visual monitoring requirements, Numeric Action Levels (NALs), and some additional monitoring requirements.

Risk Level 3 projects are subject to minimum BMPs, visual monitoring requirements, and more rigorous monitoring requirements such as receiving water monitoring and in some cases bioassessment.

See the PPDG, SWPPP/WPCP Preparation Manual, and/or the SMARTS Manual for specific instructions on inputting data into SMARTS.

It is important that the DCSWC reviews the SWDR attachment for SMARTS input developed at PS&E. The contractor might use this information to prepare the SWPPP (usually submitted as part of the contract documents- Informational Handout (IH)). There must be an evaluation of the tentative start and end date of construction since that will in part dictate the RL for the project. If the project extends beyond the initial estimated completion date, a Change of Information (COI) must be filed in SMARTS with the revised R value for the risk level determination after the NOI is processed by SMARTS. If the project's risk level increases after construction starts, that will require a SWPPP amendment and, in turn, necessitate a CCO to address the new CGP requirements based on the revised RL.

In order to have the NOI processed via SMARTS, a SWPPP prepared by a QSD and authorized by the RE, must be uploaded. Once the LRP certifies the NOI, SMARTS will generate a WDID number for the project.



3.4 Pre-Construction Meeting

The DCSWC, or CSWC staff, should attend the pre-construction meeting to assist the RE in discussing the water pollution controls required for the project. The DCSWC should assist the RE to ensure that a RWQCB representative is invited to the pre-construction meeting as required by the SWMP. The invitation is usually sent via e-mail when the other attendees are invited. The district usually has a list of necessary attendees to which the RWQCB representative should be added as required by the CGP for SWPPP projects. When the invitation is sent, it should be documented in the project files as discussed in Section 5 of this Manual. Attendance at the pre-construction meeting is at the discretion of the RWQCB and should not affect the construction schedule. The requirement is not that a RWQCB representative attend the pre-construction meeting, only that an invitation be extended.

The pre-construction meeting should address a number of topics. A list of stormwater items to be discussed items is provided in Appendix A. The DCSWC should be prepared to give a short presentation covering stormwater topics outlined in Appendix A or the topics directly related to the project.

At the meeting, the construction schedule is reviewed. The project start date and clearing and grubbing operations or other soil disturbing activity start dates are noted.

Information about other regulatory permits that govern the project should also be reviewed including:

- If the project affects or is near an environmentally sensitive area (ESA), there may be special
 requirements for the area that should be discussed.
- If the project affects an Area of Special Biological Significance (ASBS), see PPDG Appendix G for Caltrans locations, there may be special requirements for the area that should be discussed.
- Other plans and permits that may govern the project should be discussed.
- If the project affects a navigable water body, a Clean Water Act (CWA), Section 404 permit is required from the U.S. Army Corps of Engineers. The RWQCB may issue requirements for the project on such a permit through a CWA Section 401 certification.
- The California Department of Fish and Wildlife may have issued a Streambed Alteration Agreement, 1601 Permit or 1602 Permit.
- If the construction project disturbs aerially deposited lead, the California Department of Toxic Substances Control Agreement might apply depending on the concentration of the material
- If the project includes dewatering, coverage under a general RWQCB permit, WDR, or site-specific NPDES permit may be required for the proposed discharge.

If any of these regulatory permits apply to the project, it is important to discuss them to ensure that the contractor understands how to comply with them. These State and Federal regulatory agencies, and the permits they issue, are described in more detail in Section 6.

Additional pre-construction meeting topics include:

- Contract Special Provision for water pollution control such as RL if project is a SWPPP under the CGP
- Conceptual SWPPP, if one was developed for the project by Caltrans
- Available project reports
- NOI/Risk Level calculation
- Project plan details for construction of permanent BMPs that require post-construction maintenance
- · Project plans or special provisions that may require specific temporary BMPs



3.5 SWPPP/WPCP Review

The RE is responsible for reviewing and authorizing the project SWPPP/WPCP. The SWPPP/WPCP Preparation Manual should be used for conducting this review.

Section 13 of the 2015 Standard Specifications reference the SWPPP/WPCP Preparation Manual and templates for the required format and content of the SWPPP/WPCP. The SWPPP/WPCP Preparation Manual gives instructions for preparing each section of the SWPPP/WPCP. It details the required text and format. It also includes examples for some sections and provides guidance for modifying the content to address site-specific conditions.

Contractor is required to use the latest SWPPP/WPCP templates available at http://www.dot.ca.gov/hq/construc/stormwater/

The REs typically forwards the project SWPPP/WPCP to the DCSWC for assistance in reviewing and providing comments. When reviewing the SWPPP/WPCP, the DCSWC should make notes of the required revisions and send them to the RE. The RE directs the contractor to make the required changes.

The RE should not allow any soil disturbing activities to occur until SMARTS generates the WDID number for the project (SWPPP Projects).

Amendments are changes to the SWPPP/WPCP after the SWPPP/WPCP is authorized by the RE. Note that an amendment is not the same as a revision that is made prior to the RE's initial authorization of the document. Amendments may need to be made throughout the project to comply with applicable NPDES permits or changes in site conditions, and impacts to overall schedule.

The RWQCB representative can request to review the project files when inspecting a construction site. The contractor's SWPPP is required to be available for review on site. Amendments to the SWPPP must be attached to the onsite SWPPP. Maintaining onsite project files with all amendments and site inspection reports is tangible evidence of the effort that is being made for water pollution control and permit compliance. RWQCBs have issued NOVs when onsite SWPPP documentation has been found to be incomplete (e.g., missing amendments).

The RE can allow a conditional WPCP acceptance so that some initial work can begin, this can occur so long as the activities do not involve soil disturbing activities, for example:

- Traffic control, K-rail placement
- Construction area sign placement

3.6 Site Inspections

This section describes the responsibilities for the various stormwater inspections that are required at construction sites. Site inspections are required to be conducted by the contractor, the RE, and IQA inspectors as part of the Caltrans stormwater program.

CEM forms have been prepared to provide consistency for all construction stormwater inspection requirements. The construction contractor is required to use the following forms as outlined in the SWPPP/WPCP Preparation Manual and SWPPP/WPCP templates.

Table 3-2. CEM Forms		
Form Number	Form Name	
CEM-2006	Legally Responsible Person Authorization of Approved Signatory (Optional)	
CEM-2006T	Legally Responsible Person Authorization of Approved Signatory - Lake Tahoe Hydrologic Unit (Optional)	



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Table 3-2. CEM Forms		
Form Number	Form Name	
CEM-2008	SWPPP/WPCP Amendment Certification and Acceptance	
CEM-2009	SWPPP/WPCP Amendments Log	
CEM-2023	Stormwater Training Record	
CEM-2024	Stormwater Training Log - Optional	
CEM-2030	Stormwater Site Inspection Report	
CEM-2031T	Daily Stormwater Site Inspection Report- Lake Tahoe Hydrologic Unit	
CEM-2032	Permanent Erosion control establishment (PECE)	
CEM-2034	Monthly Stormwater Best Management Practices & Materials Inventory Report - Optional	
CEM-2035	Stormwater Corrective Actions Summary	
CEM-2035T	Stormwater Corrective Actions Summary - Lake Tahoe Hydrologic Unit	
CEM-2045	Rain Event Action Plan	
CEM-2045T	Rain Event Action Plan- Lake Tahoe Hydrologic Unit	
CEM-2051	Stormwater Sampling and Analysis Log - Optional	
CEM-2052	Stormwater Sample Field Test Report	
CEM-2058	Stormwater Meter Calibration Record - Specialty Meters	
CEM-2061	Notice of Discharge Report	
CEM-2061T	Notice of Discharge Report- Lake Tahoe Hydrologic Unit Stormwater Sample Field Test Report/Receiving Water Monitoring Report	
CEM-2062	Numeric Action Level Exceedance Report/ Receiving Water Monitoring Trigger Report	
CEM-2062T	Numeric Action Level Exceedance Report/ Receiving Water Monitoring Trigger Report Lake Tahoe Hydrologic Unit	
CEM-2063	Numeric Effluent Limitation Violation Report - ATS Discharges	
CEM-2063T	Numeric Effluent Limitation Violation Report - Lake Tahoe Hydrologic Unit	
CEM-2070	SWPPP/WPCP Annual Certification of Compliance	
CEM-2075	Project Stormwater Annual Report	
CEM-2075T	Project Stormwater Annual Report- Lake Tahoe Hydrologic Unit	

3.6.1 Contractor Inspections

At a minimum, the contractor is required to inspect the construction site weekly, and before, during (every 24 hours), and after rain events. Moreover, water pollution control specifications (Section 13) require the contractor to conduct quarterly non-stormwater inspections.

The contractor is required to submit the appropriate CEM inspection reports to the RE within 24 hours of the inspection. The DCSWC should assist the RE in ensuring that the contractor inspections fully represent the site conditions. If contractor inspections are not properly documented, the DCSWC should assist the RE in corresponding with the contractor to require that the inspections be properly conducted, documented and submitted. The DCSWC should make sure that the RE is aware that copies of all contractor inspection reports are maintained with the project SWPPP/WPCP records.



3.6.2 Resident Engineer Inspections

The RE is required to conduct inspections at the same frequency as the contractor; that is, quarterly, weekly, and before, after, and during rain events.

The RE must designate a SWPPP inspector to conduct the inspections for the RE as described in Section 7 of the Construction Manual. Desirable qualifications for the SWPPP inspector include construction inspection experience, overall project knowledge, landscape architect experience, hydraulics or environmental engineering experience, and experience in reading and understanding the SWPPP document and implementation of the plan in the field.

For pre-storm inspections, the inspection should consider the following:

- Are the active areas limited to the maximum amount that can be timely stabilized if rain is imminent?
- Are the required BMPs for soil stabilization, linear sediment control barriers, and desilting basins implemented for the active and in-active disturbed soil areas (DSAs) in compliance with the authorized SWPPP/WPCP?
- Are proper BMPs in place to divert or convey water through or around the project site from upstream offsite areas?
- Has the drainage system been cleared and cleaned? Is it ready to convey stormwater without causing flooding that could cause erosion or contact with other pollutants, or causing a safety problem or sediment-laden discharges?
- Are the non-stormwater BMPs, tracking control BMPs, and waste management and materials pollution control BMPs that were selected in the SWPPP/WPCP implemented properly?
- Are there any areas that receive run-on that could be a problem or cause erosion within the project limits?

During a rain event, the inspection should focus on the following:

- Is the selected combination of BMPs installed and functioning properly?
- Is there any flooding that could cause erosion, contact with other pollutants, or cause a traffic hazard?
- Is sampling required? Is sampling being conducted in accordance with the Sampling and Analysis Plan (SAP) in the authorized SWPPP?
- Can any BMPs be repaired or revised to correct any problems noted above under the site conditions?
- Do flow patterns match those on the Water Pollution Control Drawings (WPCDs) included in the authorized SWPPP/WPCP? Are amendments required?
- Have discharges been documented and reported in accordance with the SWPPP Section 700?

Section 4.9 of the Construction Site Monitoring Program Guidance Manual describes the duplicate field measurements. This duplicative sampling is to verify the precision of field measurements and must be conducted in the field on not less than 1 in every 10 samples. The duplicate measurements should be performed in rapid succession in the field, from duplicate samples collected side-by-side or in rapid succession from the same spot. If the measurement is made by inserting the probe into the discharge flow, the duplicate measurements should be made in rapid succession. After recording the initial result, withdraw the probe following the first measurement, and then immediately reinsert the probe into the same spot for the duplicate measurement.


After a rain event, the post-storm inspection should document the following:

- Identify BMPs that failed
- Identify BMPs that need maintenance, repair, or replacement Identify areas that need different or additional BMPs

3.6.3 Consultant Compliance Inspections

The Construction Compliance Evaluation Plan (CCEP) (CTSW-PL-17-999 Dated July 2017) describes the IQA portion of the self-audit program implemented by Caltrans for evaluating construction activities at construction sites

Audits serve as a QA mechanism to determine the adequacy of stormwater activities being implemented. The QA evaluations are conducted by the DCSWC. IQA evaluations, conducted by a third party, are implemented under the direction of the DEA – Stormwater Program and performed to fulfill the NPDES Permit requirement to perform a self-audit of field activities.

The CCEP is designed to accomplish the following objectives:

- Review construction projects for compliance with the requirements of the Caltrans Permit, the SWMP, the CGP, and applicable Lahontan RWQCB permit provisions.
- Review construction projects for compliance with relevant sections of the Caltrans Standard Specifications and Standard Plans.
- Identify sources and causes of observed findings.
- Provide a process for evaluating trends.
- Evaluate the adequacy of guidance documents and contract specifications.
- Evaluate the adequacy of the stormwater program for construction.
- Recommend program improvements, including SWMP improvements, training, research, updates to guidance documents, updates to specifications and updates to the CCEP.
- Report compliance status to Caltrans management including the Enforcement Response Plan (ERP) as required by the SWMP.
- Evaluate BMP implementation and suggest areas for improvement and new BMP implementation methodologies.

Construction IQA reviews are documented using the Project Construction Stormwater Review Report Form (Appendix B). The form documents the individual findings (deficiencies), noting each instance of noncompliance in the implementation of contract specification, field (construction site) BMPs, and SWPPP.

The complete report will consist of project site general information, a summary of the number and types of findings (deficiencies) observed including both administrative and field, corrective actions implemented, and certification by both the IQA reviewer and the individual responsible for documenting the corrective actions of the findings.

As noted in the CCEP, there is a relation between the IQA review and the Caltrans enforcement response plan, Figure 3-1 below presents the point when the ERP is initiated based on the IQA review





Figure 3-1. IQA Review Process Flowchart

3.6.4 Consultant Assistance

Consultant Assistance might be available to assist districts in responding to RWQCB request for information or to respond to enforcement actions (i.e., Notice of Violation, Administrative Civil Liability) against a specific project. This assistance is under a DEA contract and can be made available on a project by project basis.



3.6.5 DCSWC Field Reviews

The DCSWC should be conducting an inspection at least once a month of every SWPPP project and every 6 weeks for WPCP projects, using the latest appropriate inspection forms.

The DCSWC role should be proactive, when possible, rather than reactive. Conduct site visits based on the frequency mentioned in paragraph above to prevent stormwater-related problems before they arise. The DCSWC should track the projects in the district (as described in the Section 3.1) to track their project load and to identify the projects with the greatest potential for water pollution. Projects with a higher potential for water pollution should be given inspection priority to ensure that SWPPP requirements are met and projects are in compliance.

The DCSWC should record the results of field reviews, including digital photographs to show the RE or contractor areas that need attention.

3.6.6 Encroachment Permit Projects

Normally, large encroachment permit projects (determined as a complex project under Section 108 of the Encroachment Permits Manual) are assigned to a Construction RE for oversight. The DCSWC should assist the oversight engineer with these encroachment permit projects like any other construction project. Other encroachment permit projects are the responsibility of the encroachment permit inspectors. The water pollution control inspections are conducted for areas within Caltrans ROW and any areas draining onto Caltrans ROW.

3.6.7 Construction to Maintenance 90 Percent Completion Review

Maintenance reviews are typically conducted as a project nears completion (approximately 90 percent complete). At this time the RE, Maintenance Manager, Superintendent, or Supervisor should review the project and complete the "Construction to Maintenance 90 Percent Completion Review" form (MTCE-0023) during the review prior to closing the project as required per CPB 13-1, any outstanding items may not be the contractor's responsibility per the contract plans. The RE will have to approve any additional items, and in some cases, it might require the approval of additional funds to complete this work. Sometimes the project plans cannot convey what needs to be done for post-construction maintenance. The DCSWC should assist the RE in explaining what maintenance will be required and to prepare a punch list of items for the contractor to complete. In addition, the review will include any Treatment BMPs that have been constructed and will be taken over by the Division of Maintenance.

3.7 Annual Certification of Compliance

The project Annual Certification of Compliance is usually completed in June per the specifications. The DCSWC should send an e-mail reminder to REs in May identifying the projects that require the Annual Certification of Compliance to be completed by the contractor.

The RE should receive the Annual Certification of Compliance from the contractor no later than June 15. This allows sufficient time to review the certification prior to the July 15 deadline for final certification.

Upon receipt of the annual certification from the contractor, the RE needs to review and approve the certification. To approve the certification, the RE needs to verify that the project is in compliance with the project SWPPP/WPCP and the applicable NPDES permits.

If the RE cannot approve the certification, the DCSWC should assist him in preparing a list of actions required to bring the project into compliance. If the RE approves the annual certification, the RE files a copy in the Category 20 file and sends the approved original to the contractor. The contractor should file the approved certification with the onsite SWPPP.



3.8 Notice of Discharge

The NPDES permits and SWMP define the type of discharges events that require notification to the RWQCB. Unless otherwise indicated in the DWP, the District NPDES Coordinator is responsible for making non-compliance and discharge reports to the RWQCB Executive Officer or designee for WPCP Projects (CT SMARTS) using the incident report form, see Appendix C. SWPPP projects submit Notices of Discharge via SMARTS. The RE and DCSWC are responsible for providing the information to the District NPDES Coordinator so that the required notification can be made.

Not all discharges from construction activities require RWQCB notification. Some discharges or noncompliant events require immediate reporting upon discovery (see Section 3.8.1 below), while others require notification within 48 hours, five days, or 30 days. The DCSWC should assist the RE to recognize the discharges and non-compliant events that require notification and the timeframe by which notification is required to ensure timely reporting to the RWQCB.

When a discharge/non-compliant event is discovered, the RE notifies the DCSWC verbally. The RE follows up the verbal notification with a detailed written report from the contractor using the Notice of Discharge (CEM-2061 or CEM-2061T) included in the SWPPP/WPCP Preparation Manual. This information is uploaded to SMARTS for SWPPP Projects subject to CGP/LTCGP.

The DCSWC forwards the information to the District NPDES Coordinator, who is responsible for ensuring that the notice is submitted to the RWQCB (as an IRF) for WPCP projects.

SWPPP or WPCP	Type of reporting	Form to be used	Reporting completed by	Verbal notification required	SMARTS Input required (electronic submittal)	
SWPPP (RL 2 or 3, or LT SWPPP)	NAL exceedance	CEM-2062 or CEM-2062T	Initial form completed and signed by WPC Manager, submitted to RWQCB via SMARTS	Yes, 24 hr. from occurrence. No more than 48 hr. after exceeding limits.	Yes, upload as Ad Hoc- within 10 days after the conclusion of the storm event	
SWPPP RL3	NEL Exceedance- ATS	CEM-2063	Initial form completed and signed by WPC Manager, submitted to RWQCB via SMARTS	Yes, submit a violation report within 6 hours.	Yes, upload as Ad Hoc no later than 24 hrs	
SWPPP- Lake Tahoe	NEL Exceedance- ATS	CEM-2063T	Initial form completed and signed by WPC Manager, submitted to RWQCB via SMARTS	Yes, notify within 2 hours.	Yes, upload as Ad Hoc	
SWPPP	Notice of Discharge (NOD) or non-visible sampling conducted	CEM-2061 or CEM-2061T	Initial form completed and signed by WPC Manager, submitted to RWQCB via SMARTS	Yes, 24 hr. from occurrence.	Yes, upload as Ad Hoc	
SWPPP	Receiving-Water Monitoring Trigger	с		Yes, 24 hr. from occurrence.	Yes, upload as Ad Hoc	
WPCP Any type of IRF or CEM-2061 Discharge/Non- compliance		Initial form completed and signed by WPC Manager, submitted to RWQCB via CTSMARTS	Yes, 24 hr. from occurrence.	Upload via Caltrans SMARTS reporting (IRF)		



3.9 Storm Alerts

The contractor is required to monitor weather year-round and on a daily basis. This is particularly important for SWPPP RL2 and 3 projects as well as projects subject to the LTCGP since stormwater sampling might be required for QREs.

The DCSWC should monitor the weather forecasts using NOAA as required by the CGP and Section 13 standard specifications. When a storm event is forecasted, the DCSWC should assist construction staff by alerting the REs as to the chance of rain and the area where the rain is expected. The RE should also be reminded to direct the contractor to ensure REAPs are prepared and any deficiencies identified therein are corrected before a precipitation event occurs. At a minimum, this would include the minimum combination of BMPs from CGP Attachments based on RL and the tables in the CS BMP Manual.

3.10 Notice of Termination

Caltrans is required to submit a NOT to the RWQCB for SWPPP projects once the construction and final stabilization are complete. NOTs are submitted via SMARTS. A NOT is not required for WPCP projects.

3.10.1 Who Should File

Typically, the RE is responsible for submitting the NOT to the RWQCB. However, this responsibility may be given to the District NPDES Coordinator or a designee.

If the NOT is the RE's responsibility, the DCSWC should assist the RE to ensure that the NOT is filled out correctly, and attachments uploaded to SMARTS.

3.10.2 When to File

The NOT should be filed when the project meets the criteria for the NOT (CGP Section II.D). A project is considered complete when construction is complete and the requirements for final stabilization have been met. The CGP defines final stabilization as complete when an established uniform vegetative cover of 70 percent of native background vegetation cover or equivalent stabilization measure is established.

The DCSWC should assist the RE to ensure that final stabilization requirements have been met prior to accepting the contract. The NOT provides four options for declaring that final stabilization is complete. See the SMARTS Manual for specific instructions on filling out the NOT.

Until all requirements for completion are met, the project must maintain compliance with the SWPPP, including:

- SWPPP must remain on the construction site during working hours
- Site inspections must be conducted quarterly, weekly, and before, during, and after storm events
- Annual Report must be submitted
- Non-compliance reporting must continue
- Inspection records, compliance certifications, and non-compliance reports must be maintained on site
- Records must be retained for three years from the date after the project acceptance

3.10.3 Where to File

The NOT is completed via SMARTS. The information can be filled out and photographs or other supporting documents can be attached. The NOT is certified by the LRP and moves onto review by the applicable RWQCB. SMARTS will automatically send correspondence to the LRP noting whether the NOT was approved or rejected and the basis thereof. See the SMARTS Manual for additional information (Step 5 Notice of Termination).



3.11 Project Closeout

Once the final inspection of a construction project is completed, the contract is formally accepted and upkeep of the newly constructed areas is turned over to the Caltrans Division of Maintenance. For water pollution control, the Stormwater Program for Maintenance must continue to maintain erosion controls and manage the drainage facilities and water pollution control devices.

The conditions required for termination of NPDES permit coverage (as described in Section 3.10) may not be met simultaneously with Relief Maintenance and Responsibility, Acceptance of Contract or Temporary Suspension of Work. A joint review with involved parties, such as the contractor, Landscape and Design staff, and particularly Environmental and Maintenance staff, is recommended prior to Acceptance of Contract.

Conditions for accepting the contract should include:

- Compliance with NPDES permit requirements.
- Compliance with local stormwater management requirements.
- Proper disposal of construction materials and wastes.
- Review and discussion of operations of the facilities and the features that require special attention.
- Identification of work that may be required after contract acceptance with notification to the applicable Caltrans personnel.
- Evaluation of vegetated areas that are not fully established for continued sediment control protection; identification of the responsible party for maintaining the controls (Maintenance or contractor). Future contracts may include special provisions for water pollution control establishment periods that require the contractor to inspect and maintain erosion control measures during the establishment period.
- Verification that temporary BMPs that cannot be removed (because they are still needed for sediment and erosion control) are left in good condition. Maintenance personnel should be fully informed of maintenance responsibilities for these BMPs.
- Verification that drainage facilities and structural controls are in good working order and clear of excess sediment and debris that could potentially inhibit flow or pollute downstream waters.
- Review of permanent drainage systems to identify future maintenance needs.
- Completion and adequacy of constructed Treatment BMPs.

3.12 Project Termination

Caltrans 2015 standard specification section 5-1.01 refers to termination of the contractor's control of work on a project. Reasons for termination of control (section 8-1.13) include

- · Failure to supply an adequate working force or material of proper quality
- Failure to prosecute the work with the diligence and force specified by the contract
- Abandonment of the project by the contractor

The State, through day labor, informed contract, or surety, will arrange for the completion of terminated projects.

The level of management required for water pollution control on terminated projects will depend on:

- The construction schedule
- Level of construction activity
- Time of the year when termination occurs



Typical water pollution control challenges that may be encountered on terminated projects include:

- DSAs left exposed
- · Missing sediment controls, or BMPs in need of maintenance
- Sediment-laden runoff entering a storm drain system or water body
- Improper solid waste management on the site
- Discharge of trash, debris, and pollutants from the site to storm drains; flooding from blocked or plugged storm drains
- Improper storage of chemicals or petroleum products within the Caltrans ROW
- Discharge of pollutants from storage areas to a storm drain system or water body
- Oil/fuel spills from leaking equipment, fueling and maintenance activities, or improper material containment
- Discharge of contaminated sediment or pollutants to a storm drain system or water body

If a significant delay is anticipated before a new contractor is in place, the DCSWC should assist the RE to coordinate with the local Maintenance Supervisor to perform any work that is necessary to comply with the NPDES permit, CGP, or other applicable permit, and to ensure public safety. The DCSWC should also assist the RE with communications with Headquarters Divisions of Construction and Maintenance and the Maintenance Supervisor to ensure permit compliance.

Once a new contractor is in place to take control of the work, the DCSWC should assist the RE to conduct a review of the site with the new contractor representative to discuss water pollution control requirements and issues on the project. If appropriate, the DCSWC and RE can submit a punch list of deficiencies that require immediate attention. The contractor will be required to prepare and implement a SWPPP or WPCP and seek coverage under the appropriate NPDES permit.



Section 4 Technical Assistance

4.1 BMP Troubleshooting Guide

It is important to troubleshoot stormwater BMPs in the field during site inspections. The best way to troubleshoot a BMP is to compare the implementation in the field with the construction details in the Construction Site BMP Manual (CS BMP Manual). Caltrans has developed the BMP Field Manual and Troubleshooting Guide that includes troubleshooting points for most BMPs. It identifies the most common problems and solutions with photographs that illustrate good and bad installations where available. The BMP Field Guide is a handy "idea toolbox" printed in a reduced size for field use. It is also available on the Caltrans Internet website.

The following sections offer specific guidance for evaluating soil stabilization BMPs, sediment control BMPs, and temporary containment for materials and waste.

4.1.1 Soil Stabilization

The CS BMP Manual (May 2017) includes tables that identify the spacing based on slope lengths

Table 4-1. Critical Slope/Sheet Flow Length Combinations						
Slope Percentage Sheet flow length not to exceed						
0-25%	20 feet					
25%-50%	15 feet					
Over 50%	10 feet					

If the SWPPP/WPCP does not include these requirements, the DCSWC should recommend that the RE direct the contractor to amend (if already authorized) or revise (if still under initial review) the SWPPP/WPCP. Once incorporated into the SWPPP/WPCP, the tables should be used when conducting a site inspection.

The tables do not direct the Contractor to implement specific BMPs. If required to implement soil stabilization, the contractor can elect to use one or more of the soil stabilization BMPs selected in the SWPPP to meet the requirement as specified in the SWPPP/WPCP Preparation Manual.

In addition, the CS BMP Manual Appendix B has additional information on selecting appropriate soil stabilization and temporary controls. The Manual is available at http://www.dot.ca.gov/hg/construc/stormwater/CSBMP-May-2017-Final.pdf.

4.1.2 Sediment Controls/Linear Barriers

Temporary sediment control practices include those that intercept and slow or detain the flow of stormwater to allow sediment to settle and be trapped. Temporary sediment control practices consist of installing linear sediment barriers such as silt fence, sandbag barrier, straw bale barrier, and fiber roll



barrier, constructing a temporary desilting basin, sediment trap, or check dam, or sweeping and vacuuming. Linear sediment barriers are typically placed below the toe of exposed and erodible slopes, down slope of exposed soil areas, around temporary soil stockpiles, and at other appropriate locations along the site perimeter.

The tables in the CS BMP Manual described in Section 4.1 also identify required sediment controls/linear barriers by slope characteristic. As with the soil stabilization requirements, for each site the DCSWC should assist the RE to identify the required combination of temporary sediment controls/linear barriers and incorporate them into the SWPPP/WPCP in an easy-to-read summary.

BMP installation should be done right before the area is disturbed rather than at the initial stage of the project to ensure that the BMP is as effective and extend its longevity to the maximum.

For desilting basins, Caltrans has a basin sizing tool available on the OHSD website. This tool can be used to design a basin to handle the expected load or to check the contractor's design. Basins with an impounding levee greater than 5 ft. tall and basins capable of impounding more than 35,300 cubic feet shall be designed by a professional Civil Engineer registered with the state of California. There are minimum design requirements that are required by the CGP and the LTCGP, see SC-2 Sediment/Desilting Basin (CS BMP Manual) for design, construction, and maintenance requirements. In addition, if a project has a batch plant or crushing plant which is covered under the IGP and has a separate industrial SWPPP, the Contractor must still ensure that appropriate BMPs are included in the construction SWPPP or WPCP to cover run-on and run-off from these areas onto general construction areas covered under the SWPPP or WPCP.

4.1.3 Temporary (Secondary) Containment for Materials and Waste

Waste management and materials pollution controls consist of implementing procedural and structural BMPs for handling, storing, using, and disposing of construction materials and waste to prevent their release into stormwater discharges. The objective is to reduce the opportunity for rainfall to be exposed to these materials. The BMPs that address materials and waste handling include:

- WM-1 Material Delivery and Storage
- WM-2 Material Use
- WM-3 Stockpile Management
- WM-4 Spill Prevention and Control
- WM-5 Solid Waste Management
- WM-6 Hazardous Waste Management
- WM-7 Contaminated Soil Management
- WM-8 Concrete Waste Management
- WM-9 Sanitary/Septic Waste Management
- WM-10 Liquid Waste Management

These BMPs are implemented at all construction sites with delivery and storage of the following:

- Soil
- Pesticides and herbicides
- Fertilizers
- Detergents
- Plaster
- Petroleum products such as fuel, oil, and grease
- Asphalt and concrete components



- Hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds
- Concrete compounds
- Other materials that may be detrimental if released to the environment

Temporary containment (secondary containment) is required for storage, preparation, and mixing of liquids, petroleum products, and substances listed in 40 Code of Federal Regulations (CFR) Parts 110, 117, or 302.

For example, 40 CFR, Part 110 addresses the discharge of oil. The regulation does not list individual substances as such, but does define oil as "oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil." In 40 CFR, Parts 117 and 302, hazardous substances under the Comprehensive Environmental Response and Compensation and Liability Act (CERCLA) are listed.

Temporary containment is required to provide a spill containment volume able to contain precipitation from a 24-hour, 25-year storm event, plus the greater of 10 percent of the aggregate volume of all containers or 100 percent of the capacity of the largest tank within its boundary. Temporary containment must be impervious to the materials stored there for a minimum contact time of 72 hours.

Temporary containment facilities are to be maintained free of accumulated rainfall and spills. In the event of spills or leaks, accumulated rain water and spills are to be placed into drums after each rainfall and are to be handled as hazardous waste unless testing determines them to be non-hazardous. Non-hazardous liquids are to be sent to an approved disposal site. Facilities must be covered. It can include the use of plastic tarps for small facilities or constructed roofs with overhangs. Unless watertight, containers of dry waste are to be stored on pallets.

Sampling and analysis for visually non-detectable pollutants may be required unless materials are stored under watertight conditions. A material stored indoors or covered in a proper temporary containment area may meet the definition of watertight condition if rain is prevented from contacting or running on to the materials, and if the materials do not have the potential to leave the containment area.

4.2 Sampling and Analysis Plans

The CGP and the LTCGP require sampling and analysis of SWPPP construction site runoff under certain conditions. Caltrans has developed sample SAPs that are incorporated into the SWPPP templates. A SAP is required for every SWPPP project that has the potential to discharge non-visible detectable pollutants and for any project that has a Risk Level 2 or 3. LTCGP projects must include SAPs. Every SWPPP project at a minimum must incorporate a SAP for non-visible pollutants.

Caltrans has also developed a Pollutant Testing Guidance Table. The table lists categories of pollutant sources, construction site materials, whether the pollutant is visually detectable, pollutant indicators, and suggested analyses for testing for the presence of the pollutant. This table should be used in conjunction with the sample SAPs to develop or evaluate the SAP of the SWPPP. Although the table identifies total petroleum hydrocarbons (TPH) and antifreeze as visually detectable substances (and therefore not subject to the sampling and analysis requirement), some districts require sampling for TPH and antifreeze because they feel that these are not visually detectable. This Pollutant Testing Guidance Table will be updated periodically as more information is available. The Pollutant Testing Guidance Table is included as part of the SWPPP template.

The contractor is responsible for conducting the sampling as required in the SAP. Many of the required sampling parameters can be easily measured in the field. If field measurements are collected, the instrument needs to be calibrated prior to measuring, in accordance with the manufacturer's specifications. The calibration and measurement data must be documented. Sampling data should be uploaded to SMARTS (as an ad hoc event).



4.3 Contract Change Orders and Claims

Caltrans construction projects include line item BMPs in every contract for water pollution control. Line items are included in Section 2.8.3 of this Manual. The RE should follow standard specification 9-1.06 Changed Quantity Payment Adjustments if adjustments are needed in the amount of BMPs included in the contract.

If requested by the contractor and approved by the RE, changes to the water pollution control practices, including the addition of new water pollution control practices, will be allowed. The changes shall be included in an authorized amendment to the SWPPP. If the changes to the water pollution control practices requested by the contractor would result in a net cost increase to the lump sum price for water pollution control, an adjustment in compensation will be made without change to the item of water pollution control.

Unless Caltrans changes the scope of the project, the contractor should implement the project in accordance with the authorized SWPPP. If the contractor underestimated the BMP quantities or unit costs, the SWPPP should be amended in accordance with the SWPPP/WPCP Preparation Manual. However, site-specific conditions may require Caltrans to issue a CCO for additional BMPs. For example, a storm event may occur that exceeds the design parameters of an approved BMP. If there are changes in site conditions or implementation, the SWPPP/WPCP must be revised to reflect site conditions and BMP implementation must take place.

4.4 Training

One of the responsibilities of the DCSWC is training. The DCSWC assists the RE by arranging for training or conducting training for the construction field staff. Headquarters has developed several stormwater training courses for construction personnel, including the most recent course offerings:

• Water Pollution Control Compliance on Construction Sites Modules 1-7

In addition to these formal training courses, the DCSWC should provide informal field training on a sitespecific as-needed basis. When conducting a site inspection or assistance review, informal training should be a constant partner. Field training is especially necessary for inexperienced SWPPP inspectors or REs, for projects in high risk areas defined in the DWPs, and for projects with a high potential for water pollution. There are also annual RE meetings at which stormwater issues are discussed, see Section 2.7.8 above of this manual.

4.5 Dewatering

The Dewatering Guide was revised in 2014 to establish uniform policies and guidelines to support dewatering operations on construction sites. It provides the information necessary to manage dewatering operations on construction sites to maintain compliance with Federal and State water quality protection regulations. The Dewatering Guide summarizes RWQCB general NPDES permit requirements for typical dewatering operations by Caltrans districts. The Dewatering Guide addresses the following options for managing dewatering operations:

- · Managing dewatering effluent without discharge to a water body or drainage system
- Discharge of effluent to adjacent land or facility owned by others by agreement between Caltrans and adjacent land or facility owners
- Discharge of effluent to a sanitary sewer by agreement with the appropriate agency
- Removal and disposal of collected water by an approved commercial transportation, storage, and disposal contractor and facility



• Discharge to a storm drain or water body under the Caltrans NPDES Permit and in accordance with NS-2 Dewatering Operations. The table below has been updated from the Dewatering Guide.

Table 4	-2. Regional Board Dewatering General Permit, WDRs & Waivers by Caltrans Districts 1
Caltrans District	Regional Board Dewatering General Permit, WDRs & Waivers
1	Region 1 – General Permit R1-2015-0003
	Region 5 – General Permit R5-2016-0076
2	Region 1 – General Permit R1-2015-0003
	Region 5 – General Permit R-5-2016-0076
	Region 6 - General Permit R6T-2014-0049 NPDES CAG996001 & R6T-2016-0010 NPDES CAG616002
3	Region 5 – General Permit R5-2016-0076
	Region 6 - General Permit R6T-2014-0049 NPDES CAG996001 & R6T-2016-0010 NPDES CAG616002
4	Region 1 – General Permit R1-2015-0003
	Region 2 - No General Permit
	Region 3 - General Permit R3-2011-0223 NPDES CAG99301 & R3-2016-0035 NPDES CAG99302
	Region 5 - General Permit R5-2016-0076
5	Region 2 - No General Permit
	Region 3 - General Permit R3-2011-0223 NPDES CAG99301 & R3-2016-0035 NPDES CAG99302
	Region 5 - General Permit R5-2016-0076
6	Region 5 - General Permit R5-2016-0076
	Region 6 - General Permit R6T-2014-0049 NPDES CAG996001 & R6T-2016-0010 NPDES CAG616002
7	Region 3 - General Permit R3-2011-0223 NPDES CAG99301 & R3-2016-0035 NPDES CAG99302
	Region 4 - General Permit R4-2013-0095 & R4-2013-0043
	Region 5 - General Permit R5-2016-0076
	Region 6 - General Permit R6T-2014-0049 NPDES CAG996001 & R6T-2016-0010 NPDES CAG616002
8	Region 6 - General Permit R6T-2014-0049 NPDES CAG996001 & R6T-2016-0010 NPDES CAG616002
	Region 7 - General Permit R7-2015-0006 NPDES CAG 997001
	Region 8 - General Permit R8-2015-0004 NPDES CAG998001 & R8-2014-0025
	Region 9 - General Permit R9-2015-0013 NPDES CAG919003
9	Region 9 - General Permit R9-2015-0013 NPDES CAG919003 & R9-2010-003 NPDES CAG679001
10	Region 2 - No General Permit
	Region 5 – General Permit R5-2016-0076
	Region 6 - General Permit R6T-2014-0049 NPDES CAG996001 & R6T-2016-0010 NPDES CAG616002
11	Region 7 – General Permit R7-2009-0300
	Region 9 - General Permit R9-2015-0013 NPDES CAG919003 & R9-2010-003 NPDES CAG679001
12	Region 8 - General Permit R8-2015-0004 NPDES CAG998001 & R8-2014-0025
	Region 9 - General Permit R9-2015-0013 NPDES CAG919003 & R9-2010-003 NPDES CAG679001

The DCSWC should be informed if there is any construction dewatering on a project. The DCSWC should use the Dewatering Guide to assist the RE in ensuring that the contractor complies with requirements. Many contracts do not address dewatering because there is no work in or near a water body, and groundwater is not near the surface and is not expected to be encountered during construction.

¹ This table is included in the 2014 Dewatering Guide, it has been updated as of October 2017.



However, dewatering of accumulated rainwater also requires compliance with the Dewatering Guide and NS-2. If the SWPPP/WPCP does not include NS-2 Dewatering Operations, assist the RE to direct the contractor to amend the SWPPP to include the BMP in the event of unplanned dewatering.

If a dewatering operation is conducted under a RWQCB NPDES permit, the permit identifies a monitoring and reporting program for sampling and analysis of the dewatering effluent and the receiving water. The contractor will be required to conduct the required sampling and analysis for dewatering operations however, the DCSWC may conduct the sampling. Although sampling and analysis requirements vary, temperature must be measured in the field and is usually a required parameter for dewatering analysis. The DCSWC should have a field instrument to measure temperature. If used, the temperature meter must be calibrated in accordance with the manufacturer's specifications and the calibration and field measurement data must be documented. Any additional analyses should be conducted by an approved laboratory. The analytical parameters will be specified in the dewatering permit.

4.6 Landscape Concerns

The District Landscape Architect should be consulted for landscape concerns that could potentially affect water pollution control, as appropriate. The DCSWC should act as a liaison between the RE and the Landscape Architect when a landscape concern at a project could affect water pollution control.

One potential landscape concern is the selection of a proper seed mix where the final stabilization for a slope is vegetation. The SSPs state that seed with less than the specified purity or germination may be used under the following conditions:

- The contractor increases the application rate for the seed to compensate for the less than specified purity or germination.
- The contractor submits the purity and germination percentages, and the proposed increased application rate for the seed to the RE prior to use.
- The RE approves use of the seed and the increased application rate in writing prior to application.
- The additional seed required because of the increased application rate is furnished and applied at the contractor's expense.

The Landscape Architect or landscape inspector can use the following Pure Live Seed (PLS) formulas to assist the RE in ensuring proper coverage:

%purity x %germination= %PLS

PLS weight needed =bulk weight x %PLS Seed mix

CEM-2032 Permanent Erosion Control Establishment (PECE) Report is to be completed when the contract has a bid item for Permanent Erosion Control Establishment.

There is a Headquarters seed contract, contact Jack Broadbent or the Landscape Architecture Branch if you need additional information on verifying seed purity or germination.



Section 5 Reporting

Provision E.I of the Caltrans NPDES Permit requires Caltrans to review the SWMP annually and to revise it as necessary to maintain an effective program. Revisions to the SWMP are submitted as part of the Annual Report to the SWRCB.

5.1 Caltrans Annual Report

The DCSWC might be asked to provide input to the Caltrans Annual Report with regard to construction project activities. The DCSWC coordinates with the Headquarters Construction Division SWC and the District NPDES Coordinator to provide the information related to construction project water pollution control issues for the Annual Report.

Examples of information that may be requested from a DCSWC for the Caltrans Annual Report include the following:

- Information and statistics about stormwater training of construction staff
- Log of pre-construction meetings
- Number of SWPPP/WPCP projects for the reporting year. This includes all active projects (at any portion of the reporting year, even if they are no longer active)
- Notices of Violation or Fines

5.2 Management Updates

The DCSWC is responsible for keeping management informed on the status of water pollution control compliance for construction within the district.

5.3 Stormwater Portal

The Caltrans Stormwater Portal² facilitates data collection required by the Caltrans NPDES Permit during the fiscal year. Data collected will help ensure compliance with the Caltrans NPDES Permit and SWMP. It will also be used to track compliance with the NPDES Permit, SWMP, TMDLs, local, state, and federal water quality regulations, and to generate various reports.

The DWP will include the responsibility of specific staff to provide or input data onto the Portal. Generally, the District NPDES Coordinator is the person in the district responsible for gathering and inputting information into the Portal.

The Portal requires a user account registered with Headquarters/DEA, contact the Portal site administrations to request a new account if one is needed. Otherwise, the GIS-based map tools and read-only demo versions are available for use as follows:

GIS Map Tools Access Only

• Username: maptools

² For more information, please visit: <u>https://env.onramp.dot.ca.gov/sw/caltrans-stormwater-portal</u>



Password: maptools

Stormwater Portal Read Only Access

- Username: readonly
- Password: readonly

5.3.1 Construction Requirements Page

The construction requirements page is organized under its own tab from the main menu as follows:

Storm	water Porta		Welcome, Walter Yu MY ACCOUNT LOS OUT				
Home Environmental Design Analysis/NPDES	Construction Maintenance / Operation		TMDLs Reporting				
	Annual Reporting	2					
	BMP	9					
Welcome	Effectiveness Evaluation	Latest Portal Updates					
About the Caltrans Stormwater Portal	Incident Reporting		odated export to report function				
Site Map	Measurable Objectives I including the BMP List T		filter that is displayed on many pages ool and Project EA Tool has been				
About the Caltrans NPDES Permit	SWPPP Implementation	updated to a new format.					
	Training 🛛						
Frequently Asked Questions	Upload a Report or Plan	Proposed Portal Upda	odates				
Where to Get Help							
Contact the Webmaster	\wedge						
Quick Start Guides	$\angle $						
References » Caltrans Statewide NPDES Permit » Stormwater Management Plan (SWMF » Stormwater Annual Report and Distric							
Latest Portal News The Portal's Welcome page has been u	pdated to inform users of recer	nt updates to the Portal and also future	planned Portal updates.				

Requirements are currently organized into the follow categories:

- 1. Annual Reporting (grouping of items below)
- 2. Post-Construction Treatment BMPs
- 3. Effectiveness Evaluation
- 4. Incident Reporting
- 5. Measurable Objectives (MOs)
- 6. SWPPP Implementation
- 7. Training
- 8. File Uploads

5.3.2 Post-Construction Treatment BMPs Page

This page allows the DCSWC to view, add, and update the status of post-construction BMPs during construction. Update the BMP to "complete" once it has been verified as correctly constructed during the 90 percent completion walkthrough with the Maintenance Superintendent or Supervisor, or the District Maintenance SWC. The page also allows the DCSWC to view current BMPs for a given project.



5.3.3 Effectiveness Evaluation Page

This page was designed to address the MOs with a goal of the C-Evaluate Program as defined in the SWMP. They work in a two-step process. First, data is entered or documents are uploaded into another area of the Portal, typically by the owner and/or supporting functional units. Secondly, the MO owner navigates to the Effectiveness Evaluation Page for that MO. When the MO is selected, the Portal creates a list of links that allow the MO owner to see the data and documents that have been uploaded to meet that MO.

Construction						
Annual Reporting	Effectiveness Evalua	tion				
BMP						
Effectiveness Evaluation	Fiscal Year	2016-2017 🔽				
Incident Reporting	Document Title	CGP/TCGP Construction Guidance Construction Guidance (<1 acre)				
Measurable Objectives	Based on the findings of the	Construction Year-End Performance Report Inspection Program Activities				
SWPPP Implementation	report, were any changes to policies or procedures proposed?	Training Activities				
Upload a Report or Plan	Status	Draft 🗸				
	File	Select				
	REVIEW					

5.3.4 Incident Reporting Page

This page allows the DCSWC or the District NPDES coordinator to view and add incident reports; as a result, the DCSWC or the District NPDES coordinator should complete a new report for each incident as/if they occur so that the information is accurately reflected in the Annual Report.



Home Environmental Analysis/NPDES	Design Construction				Welcome, Walter Yu Sea SWAT TMDLs Reporting	The Account Log out
Construction Annual Reporting BMP Effectiveness Evaluation	Incident R	eporting			Construction Non-compliance Encroachment Non-complianc Maintenance Non-compliance	e Reporting
Incident Reporting	Type of Incident	Within 5 Work Days(Verbal)	ing	Within 10 Working Days(Written) ⁵	Within 30 Calendar Days (Written) ⁵	In Annual Report
Measurable Objectives SWPPP Implementation	Emergency Incidents ^{1,2}	-		-	-	Chronological summary and status of all incidents
Training Upload a Report or Plan	Field ³	Notify Caltrans H DEA-SWP; Notif RWQCB Exec O	ý	To RWQCB Exec Officer; Copy HQ DEA-SWP	-	Chronological summary and status of all incidents
Upicad a Report of Plan	Administrative ⁴	Notify HQ DEA-SWP; Notify RWQCB Exec Officer or SWRCB Contact		-	To RWQCB Executive Officer, SWRCB Executive Director; Copy to Caltrans HQ DEA-SWP	Chronological summary and status of all incidents
	Туре		C Emer Field			
	Incident start date and time		* •			
	Incident end date	e and time				
	District		Select	•		

5.3.5 Measurable Objectives Page

This page allows the DCSWC or the District NPDES coordinator to view and edit their MOs. As a result, the DCSWC should keep this data updated for their district. There are currently 2 MOs for district construction with the role of owner (reporting frequency of MOs depends on the MO; most are annual with quarterly updates) as follows:

- 1. Documentation and Reporting: Incident Report in SMARTS and Non-compliance Incidents to SWRCB or RWQCB
- 2. Inspection Program Evaluation

For Headquarters Construction as owner there are the following MOs:

- 1. Construction guidance (develop, implement and evaluate goals)
- 2. Guidance to ensure industrial activities and facilities are covered by IGP (implement goal)
- 3. New construction guidance as needed to comply with new Statewide CGP and new LTCGP requirements (implement and evaluate program goals)
- 4. Training (implement and evaluate program goals)

5.3.6 SWPPP Implementation Page

This page allows the DCSWC or the District NPDES coordinator to view and edit the number of active construction sites requiring/with a SWPPP or WPCP. As a result, the DCSWC or the District NPDES coordinator should keep this data updated for their district.



Home Environmental Audysly/NPDES Design Construction Maintenance /Operations Thirl Party Activities SUS1 / Map Tools WAIt TMULs Reporting SWPPP Implementation District District District 2016-2017 Total Number of Active Construction Sites roupiring a SWPPP 13 Total Number of Active Construction Sites with a WPCP 15 Total Number of Active Construction Sites with a WPCP 15 Total Number of Active Construction Sites with a WPCP	Sto	ormwater Portal	Welcome, Walter Yu MY ACCOUNT LOG OUT
RESET ADD District 10 District Fiscal Year 2016-2017 Total Number of Active Construction Sites 28 Total Number of Active Construction Sites expuring a SWPPP 13 Total Number of Active Construction Sites with a SWPPP 15 Total Number of Active Construction Sites with a WPCP 15			SWAT TMDLs Reporting
Total Number of Active Construction Sites 28 Total Number of Active Construction Sites requiring a SWPPP 13 Total Number of Active Construction Sites with a SWPPP 13 Total Number of Active Construction Sites with a SWPCP 15 Total Number of Active Construction Sites with a WPCP 15			10
Total Number of Active Construction Sites requiring a SWPPP 13 Total Number of Active Construction Sites with a SWPPP 13 Total Number of Active Construction Sites with a WPCP 15 Total Number of Active Construction Sites with a WPCP 15			
Total Number of Active Construction Sites with a SWPPP 13 Total Number of Active Construction Sites requiring a WPCP 15 Total Number of Active Construction Sites with a WPCP 15	 Fiscal Year 		
Total Number of Active Construction Sites requiring a WPCP 15 Total Number of Active Construction Sites with a WPCP 15			
Total Number of Active Construction Sites with a WPCP 15			
VEWEDIT			
		VIEW/EDIT	
		VIEW/EDIT	
		VIEW/EDIT	
		VIEWEDIT	
		VIEWEDIT	
		VEWEDIT	

5.3.7 Training Page

This page allows the DCSWC to view and edit the number of training activities provided. As a result, the DCSWC or the District NPDES coordinator should keep this data updated for their district.

The DCSWC or the District NPDES coordinator should update training information on which modules, attendees, training provided by the district and/or Headquarters so that the information is accurately reflected in the Annual Report.

Stor	rmwater Porta		Van Line			Search	
Home Environmental Analysis/NPDES	Design Construction Maintenance / Operations	Third Party Activities	SDSI / Map Tools	SWAT T	MDLs Rep	orting	
Training							
Administration	Add Training						
Annual Reporting	Distant						
BMP	District	HQ -					
Cooperative Implementation Agreements	Functional Unit / Type of Training			•			
Effectiveness Evaluation	Title of Training	Other 💌					
Enforcement Tracking	Other Title of Training						
ICID & Illegal Dumping Incidents	Duration of Training (hours)						
Incident Reporting	Location of Training (address)						
Measurable Objectives	Training Summary						
Monitoring							
Municipal and Agency Coordination							



5.3.8 Enforcement Tracking

The DCSWC should notify DEA of any enforcement actions so that they can be updated under the enforcement tracking page and accurately reflected under the enforcement tracking page.





Section 6 Regulatory Agencies

6.1 SWRCB and RWQCBs

Although the SWRCB issued the Caltrans NPDES Permit, the nine RWQCBs are the designated primary enforcement agencies at the local level. RWQCB permit oversight includes construction site compliance inspections, program tracking, coordination, and enforcement actions. In addition, the RWQCBs regulate other stormwater dischargers. In this role, the RWQCBs communicate directly with the districts.

There are several mechanisms that Caltrans uses to communicate and coordinate with the RWQCBs. Of those, the DCSWC may be given responsibility for assisting (with the District NPDES Coordinator having direct responsibility) with the following:

- Caltrans Annual Reporting
- Notification of discharge/non-compliance
- Notification of spills and identification of IC/ID incidents
- Development of DWP
- Pre-construction or other meetings

Some of these tasks are done via SMARTS while others might be via telephone or email.

The SWMP requires Caltrans to develop DWPs. A RWQCB may have additional requirements for DWPs developed within its jurisdiction. The DWPs are posted on the Caltrans stormwater website.

As discussed in Section 6.3, the RWQCB has input into the U.S. Army Corps of Engineers (Corps) 404 Permit process through a 401 Certification. This allows the RWQCB to review the permit from the Corps and add additional requirements.

6.2 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) streambed alteration agreements and permits are normally the responsibility of Caltrans Environmental. The DCSWC should be aware of the requirements of these permits as they apply to the construction projects in their district. The DCSWC should have a contact within Caltrans Environmental to address concerns regarding any CDFW permits for their projects.

The DCSWC should review any CDFW permits or agreements for pertinent restrictions, especially those with the potential to affect stormwater runoff. The permit expiration dates are very important and could impact on construction project schedules if allowed to expire. The DCSWC should coordinate with the Environmental Construction Liaison and the RE to ensure that the expiration dates of CDFW permits or agreements are kept up-to-date.

Section 1602 of the California Department of Fish and Game (DFG) Code requires that public agencies such as Caltrans notify CDFW if proposed work affects a waterway. CDFW determines if an agreement known as a Lake/Streambed Alteration Agreement or 1602 Agreement is necessary. Any water body shown as a blue line on a USGS map is considered a waterway. The CDFW may also designate other areas as protected waterways, such as roadside ditches or ephemeral streams. When in doubt, consult with your CDFW representative.



The 1602 Agreement specifically prohibits polluting the waters of the state and may prohibit specific activities at certain times of the year (e.g., working in the river during spawning season). The agreement may also require the contractor to undertake specific measures, such as installing fish ladders. Violations of the agreement are punishable by fine, imprisonment, or both.

Section 5650 of the DFG Code prohibits the placement of specified materials in the waters of the state. Violations can result in major fines or even jail. Examples of violations include the following:

- Causing dirt and sediment to enter the waters of the State
- Using creosoted timbers in the waters of the State
- Placing petroleum products, such as asphalt or diesel, into, or where they can get into, the waters of the State
- Placing asphalt concrete (AC) grindings, chunks, and pieces in areas where they can pass into the waters of the State

A memorandum of understanding (MOU) exists between the CDFW and Caltrans regarding the placement of AC pavement grindings as shoulder backing and the placement of AC pieces and chunks in embankments. For a discussion of reusing AC as fill material and shoulder backing and a summary of the MOU refer to Section 611.11, "Conservation of Materials and Energy," of the Highway Design Manual, which is available on the Internet. If a question arises as to whether AC grindings or chunks may get into the waters of the state, consult with your CDFW representative.

The following is an excerpt from the Highway Design Manual Section 611.11(3):

(3) Use of Asphalt Concrete Grindings, Chunks and Pieces. Section 5650 of the Fish and Game Code states that it is unlawful to deposit asphalt, other petroleum products, or any material deleterious to fish, plant life, or bird life where they can pass into the waters of the State. In addition, Section 1602 of the Fish and Game Code requires notification to the CDFW prior to construction of a project that will result in the disposal or deposition of debris, waste or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake designated by the CDFW. When constructing transportation facilities, Caltrans frequently uses asphalt in mixed or combined materials such as AC pavement. Caltrans also uses recycled AC grindings and chunks. There is a potential for these materials to reach the waters of the State through erosion or inappropriate placement during construction.

The first step is to determine whether there are waters of the State in proximity to the project that could be affected by the reuse of AC. Waters of the State include: (1) perennial rivers, streams or lakes that flow or contain water continuously for all or most of the year; or (2) intermittent lakes that contain water from time to time or intermittent rivers or streams that flow from time to time, stopping and starting at intervals, and may disappear and reappear.

The reuse of AC pavement grindings will normally be consistent with the Fish and Game Code and not require a 1602 Agreement when these materials are placed where they cannot enter the waters of the State. Placement decisions must be made on case-by-case basis, so that such materials will be placed far enough away from the waters of the State to prevent weather (erosion) or maintenance operations from dislodging the material into State waters. Site-specific factors (i.e., steep slopes) should be given special care. Generally, when AC pavement grindings are being considered for placement where there is a potential for problems, CDFW should be notified to assist in determining whether a 1602 Agreement is appropriate and what mitigation strategies are available to prevent the materials from entering the waters of the State. When in doubt, it is recommended that the CDFW be notified. If there is the potential for reused AC materials to reach waters of the State through erosion or other means during construction, such



Section 6

work would normally require a 1602 Agreement. Depending on the circumstances, the following measures should be taken:

- The reuse of AC pavement grindings as fill material and shoulder backing must conform to the Caltrans Standard Specifications, applicable manuals of instruction, contract provisions and the MOU described below.
- AC chunks and pieces in embankments must be placed above the water table and covered by at least one foot of material.

6.3 U.S. Army Corps of Engineers

The Corps enforces Section 404 of the CWA. Permits issued under Section 404 are normally the responsibility of Caltrans Environmental. The DCSWC should be aware of the 404 permit requirements for the construction projects within the district, especially those that potentially affect stormwater runoff issues. The DCSWC should have a contact at Environmental to address potential issues regarding 404 permits. The DCSWC should coordinate with Environmental and the RE to ensure that the expiration dates of 404 permits are kept up-to-date.

Section 404 of the CWA requires that parties interested in depositing dredged or fill material into "Waters of the United States, including wetlands," receive authorization for such activities. The Corps has been assigned responsibility for administering the Section 404 permitting process. Activities for which permits may be required include, but are not limited to:

- Placement of fill material
- Ditching activities when the excavated material is sidecast
- Levee and dike construction
- Mechanized land clearing
- Land leveling
- Most road construction
- Dam construction

Section 401 of the CWA requires any applicant for a 404 permit to conduct any activity which may result in any discharge into navigable waters, to provide the licensing or permitting agency with a certification from the state in which the discharge will originate. The RWQCB is responsible for issuing the 401 Certification for a 404 permit for discharges to waters within its jurisdiction.

The final determination of whether an area is a wetland and whether the activity requires a permit must be made by the appropriate Corps District Office.

A copy of this permit is included in the contract documents IH and specifics included in the SWPPP/WPCP.

6.4 Department of Toxic Substances Control

The California Department of Toxic Substances Control (DTSC) is responsible for the regulation of hazardous substances and hazardous wastes. Hazardous substances are often encountered or used on construction sites and several types of hazardous waste may be generated during the course of a project. The management of hazardous substances and hazardous wastes is a potential stormwater concern that requires compliance with BMP WM-01 Material Delivery and Storage, BMP WM-02 Material Use, WM-04 Spill Prevention and Control, BMP WM-05 Hazardous Waste Management, and BMP WM-7 Contaminated Soil Management. Related specifications are located in Section 13 and Section 14-11 of the Construction Contract Specification. The DCSWC should assist the RE in complying with these requirements for protection of stormwater runoff from such substances and wastes.



Hazardous wastes commonly generated in the course of a project that could adversely impact stormwater runoff if not properly managed include striping and pavement marking residue, treated wood waste, paint debris from structures such as bridges, and excavated contaminated soil.

The hazardous substance that most commonly affects Caltrans construction sites is the presence of aerially deposited lead (ADL) in the soil. Management of ADL-contaminated soils is regulated by a Soil Management Agreement for ADL-Contaminated Soils (ADL Agreement) between Caltrans and DTSC. The Caltrans Environmental website (Appendix 0) includes a copy of the ADL Agreement. The Agreement and supporting documents are also available at:

http://www.dot.ca.gov/hq/env/haz/hw_adl.htm

The DCSWC should be familiar with the ADL Agreement for any construction projects in the District that include handling of ADL-contaminated soils.

The ADL Agreement provides some relief from hazardous waste storage and disposal requirements. However, there are specific requirements for the proper storage, reuse, and handling of the ADLcontaminated soils. The handling of ADL-contaminated soils is a potential stormwater concern that requires compliance with BMP WM-3 Stockpile Management, and BMP WM-7 Contaminated Soil Management. The contract special provisions normally include site-specific requirements for handling ADL-contaminated soils such as stockpile liner and cover requirements, and stipulations for reuse and/or disposal. District Hazardous Waste technical specialists prepare these specifications and provide support to the RE. However, the DCSWC should also assist the RE in complying with all the ADLcontaminated soil requirements for protection of stormwater runoff from such soils.

6.5 Air Pollution Control Districts/Air Quality Management Districts

The Construction Manual, Section 7-104A, Air Pollution Control, states that all Caltrans projects must comply with the Clean Air Act. Permits are issued by local air quality management districts, either Air Pollution Control Districts (APCDs) or the Air Quality Management Districts (AQMDs). This requires that the project create no smoke, offensive odors, or visible dust. Contractors must take appropriate measures to ensure that equipment is properly maintained and to apply water and other dust palliatives as frequently as necessary. Violations can result in fines and sanctions against the contractor and Caltrans.

The DCSWC should assist the RE in ensuring that the contractor is in compliance with the following requirements when dealing with wind erosion/soil control and or dust control issues. In areas where naturally occurring asbestos has been identified, the specifications will set forth additional requirements to protect workers and the public. In this case, the RE should include consideration of asbestos in the project code of safe practices.

Standard Specification 14-9.02 Air Pollution Control states:

Comply with air-pollution-control rules, regulations, ordinances, and statutes that apply to work performed under the Contract, including those provided in Govt Code § 11017 (Pub Cont Code § 10231). Section 14-11.04 addresses Dust Control

Section 18 addresses Dust Palliatives.



Appendix A: Pre-construction Meeting Topics



Appendix B: IQA Review Inspection Form



Appendix C: Incident Report Form

