

2.3.4 Hazardous Waste/Materials

2.3.4.1 Regulatory Setting

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and the Resource Conservation and Recovery Act of 1976. The purpose of the Comprehensive Environmental Response, Compensation and Liability Act, often referred to as “Superfund,” is to identify and cleanup abandoned contaminated sites so that public health and welfare are not compromised. The Resource Conservation and Recovery Act provides for “cradle to grave” regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act
- Atomic Energy Act
- Toxic Substances Control Act
- Federal Insecticide, Fungicide, and Rodenticide Act
- Executive Order 12088 *Federal Compliance with Pollution Control Standards*

Section 121(d) of the Comprehensive Environmental Response, Compensation and Liability Act requires that remedial action plans include consideration of more stringent state environmental “Applicable or Relevant and Appropriate Requirements.” The 1990 National Oil and Hazardous Substances Pollution Contingency Plan also requires compliance with Applicable or Relevant and Appropriate Requirements during remedial actions and during removal actions to the extent practicable. As a result, state laws pertaining to hazardous waste management and cleanup of contamination are also pertinent.

California regulates hazardous materials, waste, and substances under the authority of the California Health and Safety Code and is also authorized by the federal government to implement the Resource Conservation and Recovery Act in the state. The Porter-Cologne Water Quality Control Act restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

2.3.4.2 Affected Environment

This section is based on the January 28, 2025, Project-specific *Initial Site Assessment – Interstate-5/El Toro Road Interchange Improvements, Orange County, California* (ISA), prepared by Stantec Consulting Services, Inc. The ISA was conducted to identify, to the extent feasible, adverse environmental conditions, including recognized environmental conditions (RECs)¹ associated with the Project site. Several RECs were identified in the ISA with some potential to affect the Project. These are described in detail in Section 1.0, *Executive Summary*, of the ISA and summarized in Section 2.3.4.4, *ISA Findings*, in this section.

2.3.4.3 ISA Methodology

Preparation and completion of the ISA followed industry standard practice—specifically, Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-21). The ISA comprised visual reconnaissance of the Project area, interviews with key individuals, and a review of reasonably ascertainable documents to evaluate potential RECs in the Project area, which includes the area in and around the interchange improvement Project at Interstate (I-) 5 and El Toro Road and the cities of Lake Forest and Laguna Hills in Orange County, California.

Site reconnaissance was conducted as part of the ISA on October 10, 2024. Access to the Project area was generally unrestricted. The reconnaissance focused on an observation from the public right of way of current conditions as well as past uses and conditions that may indicate the presence of RECs within the Project area. The reconnaissance was conducted on foot; no building interiors were observed.

A review of historical records included an environmental database search through the State Water Resources Control Board and California Department of Toxic Substances Control as well as an agency database search report from Environmental Data Resources Inc., a third-party environmental database search firm. The records provided available information from the regulatory agencies regarding hazardous substance use, storage, or disposal within and in the vicinity of the Project.

Historical aerial photos from 1938, 1946, 1952, 1963, 1967, 1974, 1980, 1989, 1994, 2002, 2005, 2009, 2012, 2016, and 2020 were reviewed. The general type of activity on a property as well as land use changes can often be discerned from the types of structures visible in the photographs and the layout. The ISA also reviewed reverse city directories for the Project area, using approximately 5-year intervals from 1973 through 2020. The general type of activity can often be discerned from a city directory listing. Also, as part of the historical records review in the ISA, fire insurance maps that depict facilities, properties, and their uses were reviewed. These maps provide information on

¹ Per the American Society for Testing and Materials E1527-21 standard, the term *recognized environmental condition* means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property (1) due to any release to the environment, (2) under conditions indicative of a release to the environment, or (3) under conditions that pose a material threat of a future release to the environment.

the history of prior land uses and are useful in assessing whether there may be potential environmental contamination on or near a project. The maps, which have been periodically updated since the late nineteenth century, often provide valuable insight into historical uses in the area.

2.3.4.4 ISA Findings

Recognized Environmental Concerns

The ISA identified several RECs associated with the Project. However, it was noted in the ISA that the limits and locations of partial takes and temporary construction easements (TCE), along with ground disturbance (depths)² on each parcel, were unknown at the time of the ISA's preparation. Therefore, the recommendations presented in the ISA were conservative and assumed that permanent and temporary fee acquisitions could occur anywhere within the Project area. In addition, the ISA suggested that recommendations could be altered once limits of acquisition and depths of ground disturbance were better defined. The RECs listed below were identified in the ISA.

Agricultural Use. Agricultural use was observed in historical photographs between 1930 and 1960 on certain Project area parcels³ (PAP) in the vicinity of the TCEs, partial takes (PTs), and full takes (FTs). Therefore, potential exposure to pesticide- and/or herbicide-affected soils during ground disturbance is possible. Associated PAPs: PAPs 9–11 (TCE), PAP 12 (TCE/PT), and PAP 14–16 (FT).

Aerially Deposited Lead (ADL). Historical records show that El Toro Road and I-5 have existed since at least 1902 and 1942, respectively. Leaded gasoline was phased out in the mid-1990s; therefore, exposure to ADL could occur during construction. Associated PAPs: PAPs 2–5, 13, 19 (TCE/PT); PAPs 6, 7, 9, 12, 22 (TCE); and PAPs 8, 14–18 (FT).

Chevron Gas Station at 23891 Bridger Road. An active Chevron gas station is within PAP 6. The facility has received regulatory closure for historical fuel and oil releases to soil and groundwater. Although the PAP is a TCE-only site, the gas station is operational and releases to shallow soil could have occurred within the TCE. In addition, an unknown structure resembling an oil/water separator is located along Bridger Road and may be within or adjacent to the TCE. Associated PAP: PAP 6 (TCE).

Shell Gas Station at 23852 El Toro Road. An active Shell gas station is within PAP 17. Agency records indicate that historical releases of gasoline and diesel occurred on site, affecting soil and groundwater. However, agency closure has been issued. The ISA

² The ISA assumed that ground disturbance within the proposed TCEs will not extend more than 1 foot below ground surface vertically and/or 15 feet laterally from the existing right of way.

³ The term *Project area parcels* (or PAPs) is used in the Project-specific ISA. A complete list of PAPs with assessor's parcel numbers, current land uses, and the proposed depth of soil disturbance is provided in Table 1 of the ISA. Some PAPs contain singular parcels; others contain multiple parcels.

stated that residual total petroleum hydrocarbon (TPH) and volatile organic compound (VOC) contamination in soil and groundwater may be present from the active gas station or residual concentrations from the prior release (identifying it as a REC). However, it should be noted that construction activities are not expected to occur at this location as part of the Project. Associated PAP: PAP 17 (FT).

Former Gas Stations and Up-Gradient Gas Station Releases. Historical records indicate that multiple releases have occurred at hazardous materials sites (gas stations) within and up-gradient of the Project area. Some of these sites remain open cases, while others were closed with residual concentrations allowed to remain in place. Associated PAPs: PAPs 4, 5, 19 (TCE/PT) and PAPs 14–18 (FT).

Former Automotive Repair at 24196 Laguna Hills Mall. The field reconnaissance and database research identified the site at 24196 Laguna Hills Mall as a former Firestone automotive shop with an exterior oil/water separator, multiple belowground lift systems, and a historical underground storage tank (UST) for waste oil. The parcel is a planned partial take and TCE. Associated PAP: PAP 21 (TCE/PT).

Former Dry Cleaners. Historical releases have occurred from dry cleaners on PAP 11 (23684 El Toro Road) and PAP 15 (24312–24422 Rockfield Boulevard), affecting groundwater within and up-gradient of the Project area. Both sites remain active cases. PAP 11 is a TCE-only site; therefore, potential effects associated with the release are considered low-risk effects. Conversely, PAP 15 is a full take. A land use covenant has been recorded for PAP 15 that prohibits its use as a day-care, elder-care, hospital, or residential site. The covenant also requires agency notification prior to any subsurface work or excavation of contaminated soils. Associated PAPs: PAPs 4, 5, 19–21, 23 (TCE/PT) and PAPs 14, 15, 17, 18 (FT).

Other Hazardous Waste/Material Concerns

Although not considered RECs, the business environmental risks⁴ that follow were identified in the ISA and should be considered during Project implementation.

Groundwater and Soil Vapor Monitoring Wells. Various wells (i.e., for groundwater monitoring, remediation, soil vapor sampling) are associated with releases at the gas stations and dry cleaners previously mentioned.

Asbestos-Containing Materials (ACMs) and Lead-Based Paint (LBP). Given the age of structures in the Project area, hazardous building materials, such as ACMs and LBP, are likely to be encountered. Also, white and yellow lane and median striping in the Project area may contain lead, hexavalent chromium, or other hazardous materials.

⁴ The American Society for Testing and Materials defines a business environmental risk as a risk that can have a material environmental or environmentally driven impact on the business associated with the current or planned use of the subject property and not necessarily limited to those environmental issues required to be investigated by the American Society for Testing and Materials.

Regulatory Agency Database Search

As mentioned, the ISA conducted a search for environmentally related information in publicly accessible databases. This search was used to determine if the Project site is listed in any environmental databases. The information provided in these databases indicates whether prior land uses had the potential to adversely affect the site.

The sites in listed Table 2.3.4-1 were identified in the ISA as locations with some potential to affect the Project due to their location in relation the Project area and their environmental history. Sites that were identified in the ISA as having no potential to affect the Project are not listed below.

2.3.4.5 Environmental Consequences

Temporary Impacts

As described in the sections that follow, temporary impacts related to hazardous materials/waste during construction of the Build Alternative could occur within the Project limits for both the Build Alternative 1 and its design variation (Build Alternative 1a) and on specific individual properties identified for full or partial acquisition.

Build Alternatives

Build Alternative 1

Hazardous Materials Use and Hazardous Waste Generation

Under Build Alternative 1, Project construction would involve the routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and fuels. Such transport, use, and disposal must comply with applicable regulations, such as those discussed under Section 2.3.4.1, *Regulatory Setting*. Small amounts of hazardous materials would be transported, used, and disposed of during construction; however, these materials are typically used in construction projects and would not include acutely hazardous materials. Furthermore, best management practices would be employed during construction to prevent spills of hazardous materials into the surrounding environment, as required by the Project-specific Stormwater Pollution Prevention Plan under the statewide Construction General Permit (further details provided in Section 3.6.10, *Hydrology and Water Quality*). Because the Project would consist of modifications and improvements to the existing I-5/EI Toro Road interchange, long-term hazardous materials usage is expected to be negligible. As a result, Build Alternative 1 would not result in adverse impacts related to the use of hazardous materials or the generation of hazardous wastes.

Table 2.3.4-1. Hazardous Waste/Material Sites with Potential to Affect the Project

Site Name/Address	Address and Location	Site Information
The Shops at Lake Forest Shopping Center; Commercial Property Services, LLC; CVS; The Shops at Lake Forest; Value 1-hr Cleaners; Toro Cleaner; Dryclean Express	24312–24422 Rockfield Boulevard, Lake Forest PAP 15	Active Cleanup Program Site, formerly Spills, Leaks, Investigations, and Cleanups (CPS-SLIC), listing for a chlorinated VOC release to groundwater. Groundwater at this location is reported to flow southwest. The facility release is considered a REC due to the potential for VOC-affected groundwater and VOC-affected soil. Because groundwater is involved, contaminants have the potential to be encountered during construction activities in the vicinity of the site.
Exxon Mobil Oil Corporation; Mobil #18-378; SMI	23771 El Toro Road, Lake Forest Across El Toro Road, northwest of PAP 15	Active leaking UST site listing. The site was listed with multiple gasoline releases, affecting groundwater. Groundwater at this location is reported to flow south toward PAPs 14, 15, 16, and 17. The facility release is considered a REC due to the potential for gasoline and VOC-affected groundwater to be encountered during construction activities in any partial or full take areas of PAPs 14 through 17.
Arco #3013; BP West Coast Products, LLC 03013; Resource Environmental, LLC; Thomas R. Lewis	23742 El Toro Road, Lake Forest PAP 9	Active leaking UST site listing. The site listed with a gasoline release to groundwater. Groundwater at this location is reported to flow southwest. The facility release is considered a REC due to the potential for gasoline- and VOC-affected groundwater to be encountered during construction activities in any partial or full take areas of down-gradient PAPs 14 through 18. The facility is not a REC to PAP 9 because it is proposed as a TCE only and the facility has been redeveloped as a park.
New Cingular Wireless; Jim Boyd Shell	23842 El Toro Road, Lake Forest PAP 16	Closed leaking UST site (as of September 2005). The site was listed with a gasoline release to groundwater. Although this facility has received closure, the location was considered a REC in the ISA; however, no construction activities are set to occur within this area.
Chevron Service Station #9-0141; Imatah, Inc.; Chevron Service Station; El Toro Oil Corp.	23891 Bridger Road, Lake Forest PAP 6	Closed leaking UST site (as of March 2004). The site was listed with a gasoline and diesel release to groundwater. It was also listed with a previous release of waste oil to soil. PAP 6 is proposed as a TCE only. If soil disturbance is planned within the TCE, the presence of the existing gas station would be considered a REC.

Site Name/Address	Address and Location	Site Information
USA Petroleum #825; Exxon; Exxon #7-4160; Tesoro (Shell) West Coast Company, LLC #68146	23852 El Toro Road, Lake Forest PAP 17	Closed leaking UST site (as of December 2005). The site was listed with multiple gasoline and diesel releases to groundwater (2004 and 2005). Although this facility has received closure, the location (PAP 17) was considered a REC in the ISA; however, no construction activities are set to occur within this area.
Former Arco Facility No. 3079	24012 Avenida de la Carlota, Laguna Hills PAP 18	Closed leaking UST site (as of January 2004). The site was listed with a gasoline release to groundwater. Although this facility has received closure, the location (PAP 18) is considered a REC because it is a full take, and residual TPH and VOC contamination in soil and groundwater may remain and could be encountered during construction activities.
Laguna Hills Shell; Equilon Enterprises; Ashdon Development Laguna Hills; Shell #23971; Shell Oil; Shell (4056-0207)	23971 El Toro Road/Avenida de la Carlota, Laguna Hills PAP 4	Closed leaking UST site (as of January 2018). The site was listed with both a gasoline release to groundwater and a previous release of waste oil to undisclosed media. Although this facility has received closure, the location (PAP 4) is considered a REC because it is a partial take, and residual TPH and VOC contamination in soil and groundwater may remain and could be encountered during construction activities.
Silver Dry Cleaners; Silver Dry Cleaners & Tailoring; Saddleback Valley Plaza; El Toro Dental Center	23684 El Toro Road, Lake Forest PAP 11	Active CPS-SLIC listing for a release to both soil and groundwater. The site was also previously listed with a perchloroethylene and trichloroethylene release (previous listing was closed in 2005). The facility release is considered a REC due to the potential for VOC-affected soil and groundwater to be encountered during construction activities in any partial or full take areas of PAPs 14, 15, 19 through 21, and 23, depending on the depth of planned excavation.
Firestone Store #27FF; The Tire Station	24196 Laguna Hills Mall, El Toro PAP 21	Active California Environmental Reporting System HAZ WASTE listing as a hazardous waste generator. No violations or releases were noted as part of the listing. However, because PAP 21 is a former automotive repair/maintenance facility and has an oil/water separator that remains in place, it is considered a REC due to the proposed partial take and residual TPH and VOC contamination in soil and groundwater that may exist and could be encountered during construction activities.

Contamination Associated with Historical Agricultural Uses and Hazardous Waste Sites

Due to the historic and current uses of the PAPs identified in Table 2.3.4-1, there is a potential risk from hazardous waste exposure as a result of contaminated soil and groundwater during construction activities on those parcels. Depending on the contaminant characteristics and extent of contamination in particular locations, ground disturbance and excavation activities conducted during construction have the potential to encounter contaminated soil. In addition, dewatering in the Project area could result in the withdrawal of contaminated groundwater. If groundwater contains contaminants above regulatory levels, a release of affected water could present a hazard to construction personnel or the surrounding environment unless properly managed. Project Feature **PF-HAZ-1** would address this potential impact.

PF-HAZ-1 Caltrans Standard Specification Section 13-4.03G: Dewatering activities shall be conducted in accordance with Caltrans Standard Specification Section 13-4.03G, which requires implementation of measures to control dewatering operations and associated discharges to prevent environmental impacts.

Implementation of Measure **HAZ-1** would require a soil and groundwater sampling program, taking into consideration the media affected and contaminants of concern specified in the ISA, to be conducted as part of a Phase II Environmental Site Assessment to assess the presence of contaminants in Project site soil and groundwater prior to construction activities. The assessment will determine whether contamination exists and recommend subsequent steps to follow, as necessary. As needed, applicable agency notifications would occur prior to ground disturbance in affected areas. As a result, Build Alternative 1 would not result in adverse impacts related to previously contaminated sites.

Aerially Deposited Lead

As mentioned in Section 2.3.4.4, *ISA Findings*, due to the age of El Toro Road and I-5, there is potential for ADL to exist in the Project area. Soil sampling for the presence of ADL should be performed in unpaved locations of the construction zone within the Project limits prior to construction activities. Implementation of Measure **HAZ-2** would require soils that are contaminated with ADL to be handled, treated, and disposed of properly. As a result, Build Alternative 1 would not result in adverse impacts related to ADL exposure for construction personnel and the surrounding environment.

Pavement Marking Materials

White and yellow lane and pavement-marking materials removed during construction could affect construction workers and the surrounding environment because they may contain hazardous materials (e.g., lead, hexavalent chromium). Implementation of Measure **HAZ-3** requires the construction contractor to test, remove, and properly dispose of white and yellow lane and pavement-marking materials in accordance with applicable Caltrans Standard Specifications (**PF-HAZ-2**) and the Caltrans Construction Manual. As a result, Build Alternative 1 would not result in adverse impacts related to the handling of white and yellow lane and pavement-marking materials.

PF-HAZ-2 Caltrans Standard Specifications Section 14-11.12: Should construction activities result in the disturbance of lane striping and pavement-marking materials, the generated waste shall be disposed of at an appropriate permitted disposal facility, as determined by a lead specialist. Section 14-11.12 also includes specifications for removing and handling yellow thermoplastic and painted lane striping and pavement markings.

Asbestos-Containing Materials and Lead-Based Paint Related to Project Area Structures

Based on the construction dates of structures in the Project area, ACMs and LBP may be present in structures proposed to be demolished as part of Build Alternative 1. ACMs represent a concern when they are subject to damage that results in the release of fibers. Measure **HAZ-4** requires proper testing, removal, and disposal of ACMs. Measure **HAZ-5** addresses potential exposure impacts associated with LBP. As a result, Build Alternative 1 would not result in adverse impacts related to ACMs and LBP.

Previously Unidentified Contamination

Although not anticipated in areas other than those previously described (i.e., in areas where contamination is documented), if affected soil, as evidenced by staining and/or odors, is encountered during construction activities, implementation of **PF-HAZ-3** would be required.

PF-HAZ-3 Caltrans Standard Specification Section 13-4.03E (2) and Figure 7-1.1 “Unknown Hazards Procedures” in Caltrans Construction Manual (December 2025): During construction, the construction contractor shall monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during Project construction activities, the construction contractor will be required to cease work in the area and have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with “Unknown Hazards Procedures” in Chapter 7 in the Caltrans Construction Manual.

Design Variation: Build Alternative 1a

Hazardous Materials Use and Hazardous Waste Generation

During Project construction, Build Alternative 1a would also involve the routine transport, use, and disposal of hazardous materials, similar to Build Alternative 1. As such, the analysis under the *Hazardous Materials Use and Hazardous Waste Generation* subheading under Build Alternative 1, above, applies to Build Alternative 1a as well. In addition, long-term hazardous materials usage during Project operations under Build Alternative 1a would be negligible.

Contamination Associated with Historical Agricultural Uses and Hazardous Waste Sites

Ground disturbance and excavation activities conducted during construction of Build Alternative 1a also have the potential to encounter contaminated media, including soil

and groundwater, as a result of the Project area's historical agricultural use and nearby sites with a history of hazardous material/waste releases to the environment. As such, the applicable analysis under Build Alternative 1, above, applies to Build Alternative 1a as well. Implementation of **PF-HAZ-1** and Measure **HAZ-1** would also be required prior to and during construction to ensure adverse impacts related to potential exposure to contaminated media from agricultural or hazardous waste sites would not occur.

Aerially Deposited Lead

Because the Project under Build Alternative 1a also involves modifications and improvements to the existing I-5/EI Toro Road interchange and generally within the same footprint, there is potential for ADL to exist under Build Alternative 1a as well. As such, implementation of Measure **HAZ-2** would also be required under Build Alternative 1a, which, therefore, would not result in adverse impacts related to ADL exposure.

Pavement-Marking Materials

White and yellow lane striping and pavement-marking materials would also be disturbed as part of Build Alternative 1a. Similar to Build Alternative 1, implementation of **PF-HAZ-2** and Measure **HAZ-3** would require these materials to be sampled, removed, and disposed of properly and in accordance to Caltrans specifications and requirements. Therefore, Build Alternative 1a would not result in adverse impacts related to the handling of pavement-marking materials.

Asbestos-Containing Materials and Lead-Based Paint Related to Project Area Structures

ACMs and LBP may be present in structures proposed to be demolished as part of Build Alternative 1a. Similar to Alternative 1, implementation of Measure **HAZ-4** would require proper surveying, handling, and disposal of all building materials containing asbestos. Implementation of Measure **HAZ-5** would address potential exposure to LBP. Therefore, Build Alternative 1a would not result in adverse impacts related to an exposure to building materials containing asbestos and LBP.

Previously Unidentified Contamination

The construction contractor would be required (as part of **PF-HAZ-3**) to monitor ground disturbances for signs of affected soils. Affected soils would be handled consistent with Caltrans specifications and requirements. Therefore, Build Alternative 1a would not result in adverse impacts related to undocumented or unanticipated contamination.

Build Alternative 3

Build Alternative 3 includes only technological improvements; no physical or geometric changes would occur. Accordingly, Build Alternative 3 would not result in any permanent changes regarding hazardous waste generation or temporary construction-related hazardous materials use. As such, Build Alternative 3 would not result in temporary impacts related to hazardous materials/wastes.

No-Build Alternative

The No-Build Alternative would not result in the disturbance or removal of any soils, groundwater, or structures and, therefore, would not result in temporary impacts related to hazardous waste and materials.

Permanent Impacts

Build Alternatives

Build Alternative 1

Routine maintenance activities during operation of Build Alternative 1 would be required to follow applicable regulations with respect to the use, storage, handling, transport, and disposal of potentially hazardous materials. Due to the nature of the Project, these materials are expected to be used in small quantities, with very little potential for significant releases. Therefore, operation of Build Alternative 1 would not result in adverse impacts related to hazardous waste or materials.

Design Variation: Build Alternative 1a

Similar to Build Alternative 1, routine maintenance (during operations) associated with Build Alternative 1a would involve a minor use of hazardous materials and be required to follow all applicable hazardous material and waste regulations; therefore, it would not result in adverse impacts.

Build Alternative 3

Build Alternative 3 includes only technological improvements; no physical or geometric changes would occur. Accordingly, Build Alternative 3 would not result in any permanent changes regarding hazardous materials use or hazardous waste generation.

No-Build Alternative

The No-Build Alternative would not change the existing physical environment; therefore, no permanent impacts would occur. As under current conditions, routine maintenance activities would continue and be required to follow applicable regulations with respect to the handling and disposal of potentially hazardous materials.

2.3.4.6 Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures apply to Build Alternative 1 and its design variation (Build Alternative 1a), which would avoid and/or minimize potential effects related to hazardous materials and hazardous waste during implementation of the Project.

HAZ-1 Completion of a Phase II Environmental Site Assessment. A (shallow) soil and groundwater sampling program as part of a Phase II Environmental Site Assessment will be performed at PAPs (and contaminants) identified in the ISA prior to completion of the Project Approval/Environmental Documentation (PA/ED) phase and during the Project Specifications and Estimates (PS&E)

- phase. The assessments will determine whether contamination exists. Subsequent handling of the affected materials will be conducted according to applicable Caltrans Standard Specifications (such as Caltrans Standard Specification Section 13-4.03G) and the recommendations of the assessment. As necessary, applicable oversight agencies will be notified when ground disturbance occurs on previously documented contaminated sites.
- HAZ-2 Handling of ADL Affected Soils.** During construction, the construction contractor will remove and either reuse or properly dispose of soils. This includes requiring special handling, treatment, and/or disposal of ADL consistent with the California Department of Transportation lead variance from the California Department of Toxic Substances Control.
- HAZ-3 Sampling and Handling of Median Striping Materials.** During the design phase, white and yellow lane and median striping materials will be tested for hazardous-materials content (e.g., lead, hexavalent chromium). If hazardous materials are discovered, the construction contractor will remove and properly dispose of any materials in accordance with applicable Caltrans Standard Specifications (such as Caltrans Standard Specifications Section 14-11.12) and the Caltrans Construction Manual.
- HAZ-4 Asbestos-Containing Materials Surveys Prior to Demolition.** Qualified professionals will initiate an ACM survey prior to completion of the Project approval and environmental documentation phase and complete the ACM survey during the PS&E phase. The survey should be conducted on structures to be demolished by the Project in conformance with the U.S. Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants, Title 40 of the Code of Federal Regulations, and South Coast Air Quality Management District Rule 1403. In addition, notification of the South Coast Air Quality Management District prior to any structure demolition is mandatory, according to Rule 1403 (d)(1)(B).
- HAZ-5 Lead-Based Paint Surveys Prior to Demolition.** Qualified professionals will initiate a LBP survey on structures to be demolished prior to completion of the PA/ED phase and complete the LBP survey during the PS&E phase. The LBP study will be conducted by trained and/or licensed professionals and comply with U.S. Environmental Protection Agency, Housing and Urban Development, and California Department of Public Health guidelines. The LBP study report will provide a description of the LBP locations, the estimated quantities of LBP, and specific requirements for removal, containment, and off-site transport and disposal of materials containing LBP. The requirements from the study will be included in the Project specifications for implementation during Project construction. The construction contractor will implement the requirements in the LBP survey report, as included in the Project specifications.