

[Home](#) | [Programs](#) | [Environmental Analysis](#)

[Standard Environmental Reference \(SER\)](#)

[Volume 1: Guidance for Compliance](#)

Chapter 10 - Hazardous Materials, Hazardous Waste, and Contamination

Chapter 10 - Hazardous Materials, Hazardous Waste, and Contamination

Please Note: Acronyms are defined at first occurrence. All acronyms are defined again in the Acronym List which appears at the very end of the chapter.

- [What does this topic include?](#)
- [Contamination Decision tree](#)
- [Laws, Regulations, and Guidance](#)
 - [Federal Laws and Regulations](#)
 - [State Laws and Regulations](#)
 - [Interagency Coordination](#)
 - [Further References](#)
- [Process and Procedures](#)
 - [Project Screening and Scheduling of Subsequent Studies](#)
 - [Project Screening](#)
 - [Project Evaluation](#)
 - [Caltrans Records Review](#)
 - [Regulatory Agency Records Review](#)
 - [Field Visit](#)
 - [Scheduling of Subsequent Studies](#)
 - [Initial Site Assessment](#)
 - [Elements of an ISA](#)
 - [Regulatory Reports Reviewed for the ISA](#)
 - [ISA Report](#)
 - [ISA Preparer Qualifications](#)
 - [Timing of the ISA](#)
 - [ISA Updates](#)
 - [Site Investigations – PSI and DSI](#)
 - [Permits](#)
 - [Site Investigation \(PSI and DSI\) Reports](#)
 - [PSI and DSI Preparer Qualifications](#)

- [Timing of Site Investigations \(PSI and DSI\)](#)
 - [Using the PSI and DSI Reports](#)
- [Project Design \(PS&E\)](#)
 - [Investigation of Low-Risk Sites and Properties](#)
 - [PS&E Support](#)
- [Right of Way Acquisition](#)
- [Construction](#)
- [Unanticipated Contamination Decision Tree](#)
- [Property Disposal](#)
 - [Excess Lands](#)
 - [Relinquishments](#)
 - [Vacations](#)
 - [EDM and HMDD-D for Property Disposal](#)
- [CEQA Considerations for "Non-Transportation Project" activities](#)
- [Acronym list](#)

What Does This Topic Include?

Caltrans manages hazardous materials in compliance with applicable federal and state laws and regulations to protect the public, the environment, and Caltrans employees, its agents, and its activities from adverse effects related to exposure to hazardous materials. This chapter provides an overview of the procedures used to address hazardous materials, including hazardous wastes, and contamination during the project planning and delivery process.

Consistent with the Caltrans Deputy Directive (DD) 16 (Hazardous Materials), the California Health and Safety Code (HSC) Section 25501(n)(1) defines a hazardous material as:

Any material that, “because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.”

Hazardous materials include, but are not limited to, petroleum-based products (e.g., solvents, fuels, lubricants), paints, sealants, pesticides, herbicides, reprographic fluids, and electrical waste (e.g., batteries, electronics, light bulbs, and ballasts). Hazardous materials may be encountered on Caltrans property due to illegal releases, accidental spills, or past land uses. The discovery of hazardous materials may require both an immediate emergency response and/or a longer-term remedial action by Caltrans and any identified responsible parties.

Hazardous materials also include, but are not limited to, hazardous substances as defined in HSC Section 25316. DD-16 defines how Caltrans interprets and implements HSC Section 25316. The term “hazardous materials” as used herein includes, but is not limited to, hazardous substances, hazardous wastes, and any material that a handler or the administering agency has a reasonable basis to believe would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Hazardous waste is a hazardous material that has been discarded and can pose a substantial or potential hazard to human health or the environment when improperly managed. Hazardous waste possesses at least one of these four characteristics: ignitability, corrosivity, reactivity or toxicity; or appears on special United States Environmental Protection Agency (US EPA) lists.

Hazardous materials, which includes hazardous substances and hazardous wastes, that have been released into soil, surface water, groundwater, or air are contamination. Properties on which hazardous materials are currently handled, or were handled in the past, have the potential to be contaminated. Properties on which hazardous materials have been mismanaged are almost certain to be contaminated.

Contamination Decision Tree

[View the Contamination Decision Tree \(PDF\)](#) |

[Contamination Decision Tree \(ADA version\)](#)

Laws, Regulations, and Guidance

The regulatory framework for the management of hazardous materials, including hazardous wastes and contamination, is complex. There are both federal and state components. Within the state there are several agencies and departments that may have overlapping jurisdiction over any given situation. This section introduces the laws, regulations, and the federal and state entities involved. Also see Standard Environmental Reference (SER)

Volume 1, [Chapter 1, Federal Requirements](#) and

[Chapter 2, State Requirements](#) .

Federal Laws and Regulations

The US EPA regulates federal hazardous waste and oversees the remediation of contaminated sites on the National Priorities List (NPL). These sites are commonly referred to as Superfund Sites. The two most important federal laws that address environmental contamination and the management of hazardous waste are known as the:

1. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and
2. Resource Conservation and Recovery Act of 1976 (RCRA)

In addition, US EPA has the authority to protect the general public from exposure to airborne contaminants through the Clean Air Act (CAA) and restore and maintain the chemical, physical, and biological integrity of the nation's waters through the Clean Water Act (CWA).

Comprehensive, Environmental, Response, Compensation, and Liability Act

Congress enacted CERCLA, commonly known as Superfund, on December 11, 1980. This law instituted a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that might endanger public health or the environment. Specifically, CERCLA:

- established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- provided for liability of persons responsible for releases of hazardous waste at these sites; and

- established a trust fund to provide for cleanup when no Responsible Party (RP) could be identified.

Sites or properties regulated under CERCLA are placed on the NPL. The NPL is the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation.

Liability is of particular concern to Caltrans. Under CERCLA, a current or former property owner can be found responsible for remediation even if they did not contaminate the property. The remediation costs may make it impossible for a transportation project to proceed and the liability itself can make Caltrans vulnerable to future claims by adjacent property owners and others with access to the property. The costs and liability create a huge incentive to NOT acquire contaminated property and are the primary reasons for Caltrans' policy to avoid acquiring contaminated property (see Right of Way Acquisition under the Process and Procedures section below for policy discussion). These issues need to be considered early and throughout the entire planning and project delivery process.

For additional information about CERCLA see [US EPA's Superfund website](#) .

Resource Conservation and Recovery Act

RCRA authorizes US EPA to control hazardous waste from "cradle-to-grave." This control includes generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA defines certain wastes as hazardous under federal law (RCRA wastes) and establishes a framework for the management of non-hazardous wastes. RCRA addresses only active and future facilities, not abandoned or historical sites. The State of California has RCRA authorization, meaning that the authority and responsibility for the enforcement of RCRA has been delegated from US EPA to the state, specifically DTSC.

The up front and long-term costs associated with the generation of RCRA wastes must be considered when planning transportation projects. During the project development process there are special management, transportation, and disposal processes, costs, and fees to consider. RCRA waste generation can also create significant future liability for Caltrans. RCRA stipulates that the generator of hazardous waste is responsible for that waste even after proper disposal in an appropriately permitted landfill. Thus, if the landfill operator goes bankrupt, the original waste generators must take responsibility for the long-term maintenance of that landfill. Projects must minimize hazardous waste generation to avoid permanent liability and avoid acquiring contaminated property because remediation of contaminated properties usually results in generating hazardous wastes.

For additional information about RCRA see [US EPA's Clean Air Act website](#) .

Clean Air Act

The Clean Air Act protects the public from exposure to airborne contaminants that are known to be hazardous to human health. The requirements of the CAA must be considered when cleaning up soil or groundwater contamination. Under the CAA, US EPA established National Emissions Standards for Hazardous Air Pollutants (NESHAPs) which are emissions standards for air pollutants that may cause an increase in fatalities or in serious, irreversible, or incapacitating illness. Asbestos is one of the

earliest hazardous air pollutants regulated by NESHAP. Compliance with the asbestos NESHAP regulations protects the public by minimizing the release of asbestos fibers during activities involving the processing, handling, and disposal of asbestos-containing material. This is important because asbestos can be found in building products that may be encountered during structure demolition or retrofit and because naturally occurring asbestos (NOA) exists in many areas of California.

For additional information about the CAA see US EPA's Clean Air Act website.

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into waters of the United States and regulating quality standards for surface waters. This statute employs a variety of regulatory and nonregulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. The CWA created the National Pollutant Discharge Elimination System (NPDES) program, which regulates water discharges. Direct discharges or "point source" discharges are from sources such as pipes and sewers. NPDES permits, issued in California by the Regional Water Quality Control Boards (RWQCBs), contain industry-specific, technology-based and/or water-quality-based limits for pollutants, and establish pollutant monitoring and reporting requirements.

For additional information about the CWA see

[US EPA's Clean Water Act website](#) .

State Laws and Regulations

Within the California Environmental Protection Agency (Cal/EPA) are the Department of Toxic Substances Control (DTSC), the State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), California Air Resources Board (CARB), and the Department of Resources Recycling and Recovery (CalRecycle). These departments and boards provide regulatory oversight of hazardous materials, hazardous substances, hazardous waste, contamination, and non-hazardous waste.

The California Occupational Health and Safety Administration (Cal/OSHA) is responsible for enforcing California laws and regulations pertaining to workplace safety and health at contaminated sites. A brief introduction to the laws and regulations enforced by these departments and boards follows.

State Laws:

Health & Safety Code

- Division 20, Chapters 6.5 Hazardous Waste Control through 6.95 Hazardous Materials Release Response Plans and Inventory, provide authority for DTSC and include laws regarding hazardous waste management and state Superfund. These laws create a framework similar to federal CERCLA and RCRA. Laws governing underground storage tanks (UST) are also found within these sections.
- Division 26, Air Resources, provides authority for CARB. CARB is designated as the air pollution control agency for all purposes set forth in federal law. The CARB is designated as the state agency responsible for meeting the requirements of the CAA.

Water Code

Division 7 is known as the Porter-Cologne Water Quality Control Act, the law that governs water quality regulation in California as well as beneficial uses of water. This act applies to surface water, groundwater, wetlands, and both point and nonpoint sources of pollution. The nine regional water boards and the state water board were created under the authority of this act. The act requires the adoption of water quality control plans that contain the guiding policies of water pollution management in California.

[California Code of Regulations](#)

Title 8. Industrial Relations

Division 1, Department of Industrial Relations, Chapter 3.2 (Cal/OSHA), includes requirements for worker and public protection. This includes regulation of construction related activities to ensure worker and public health and safety. Regulations include exposure limits, equipment, protective clothing, and procedures required to prevent exposures to hazardous materials (including hazardous waste and contamination). Specific sections cover lead in construction safety standards and asbestos exposure, as well as accident prevention measures.

Title 17. Public Health

Division 3, Air Resources, enforced by CARB, regulates the disturbance and use of material containing NOA. Section 93105, "Airborne Toxic Control Measures (ATCM) for Construction, Grading, Quarrying and Surface Mining Operations," minimizes the emissions of asbestos by requiring the use of dust control and other safe management practices in areas containing NOA. This regulation defines construction as any activity that disturbs soil or rock containing asbestos in concentrations of 0.25% or greater. Section 93106 of Title 17, "ATCM for Surfacing Applications," mandates reduction of asbestos emissions by prohibiting the use of material containing NOA in concentrations greater than 0.25% for surfacing applications, such as unpaved roads, driveways, pathways, decorative uses, and landscaping.

Title 22. Social Security

Division 4.5, Environmental Health Standards for the Management of Hazardous Waste, defines hazardous and special waste, identifies federal and state hazardous waste criteria, and regulates the storage, transportation, and disposal of waste. Title 22 was created to regulate the hazardous wastes generated by factories or similar sources, but soil excavated during construction may also be regulated. If contaminated soil meets Title 22 waste criteria and will be excavated during construction, the soil must be handled in a manner consistent with these regulations. These regulations are also found in Title 26.

Title 23. Waters

Division 3, State Water Resources Control Board and Regional Water Quality Control Boards, contains the authority establishing the SWRCB and RWQCBs. These regulations govern both placement of waste to land and USTs. The primary goal of these regulations is to protect surface and groundwater. Regulation of the placement of waste to land can impact transportation projects because it controls the re-use and management of soil and water containing contaminants below hazardous waste thresholds. Transportation projects are also affected by these regulations when USTs will be removed as part of right of way clearance. If Caltrans removes an UST, or buys property with an UST, then Caltrans assumes responsibility and liability for the UST and any associated contamination, whether Caltrans has operated the UST

or not. The authority to regulate USTs is often delegated to local county or city environmental health offices, known as Certified Unified Program Agencies (CUPAs).

Title 26. Toxics

Title 26 is a compilation of all environmental and hazardous waste regulations issued by state regulatory agencies published in a single title of the California Administrative Code. (NOTE: These toxics regulations are also found in the original titles assigned to each agency.) Title 26 is organized with the agencies listed in numerical sequence according to their original title assignments. The regulatory sections within each division of this title also reflect the original section number assignments and are arranged in numerical sequence. The DTSC hazardous waste management regulations found in Title 22 and the SWRCB and RWQCB land disposal restrictions and underground tank regulations found in Title 23 are all repeated in Title 26.

Title 27. Environmental Protection

Division 2, Solid Waste, contains a compilation of landfill regulations that govern the construction of landfills and restrict what wastes the different classes of landfills can accept. Wastes are divided into inert (e.g., concrete, wood), household, special, and hazardous. Each of these waste types must be disposed of at the class of landfill that is constructed to contain it. Class III landfills can accept household and inert wastes, Class II landfills can accept special wastes, and Class I landfills accept hazardous waste. The regulations in Title 27 define what class of landfill can accept the material excavated from a project.

Caltrans Policies

Caltrans hazardous materials and contamination policies can be found at the Caltrans Contaminated Properties intranet website. These policies are also available to non-Caltrans staff at the “ [Contaminated Properties](#) ” external website.

- Deputy Directive 16 (DD-16) Hazardous Material
- Deputy Directive 71 (DD-71) Management of Naturally Occurring Asbestos (NOA)
- Project Delivery 02-R1 (PD-02-R1) Acquisition of Contaminated Property

Caltrans Guidance

Caltrans guidance documents can be found at the on the Caltrans Hazardous Waste Overview intranet website.

- Caltrans Underground Storage Tank Guidance
- Chemistry Guidance
- Contaminated Property Acquisition Guidance
- Environmental Reporting
- Geophysical Tools
- Health and Safety
- Hazardous Waste Storage
- Initial Site Assessment (ISA)
- Remediation
- Remediation Implementation
- Risk Analysis
- Site Closure
- Site Investigation

- Task Order Management
- Thermoplastics and Road Striping Waste

Interagency Coordination

Regulatory agencies may have information about a site or property that is critical for determining the viability of project alternatives. Businesses that handle hazardous materials are inspected for compliance with regulations. A regulatory agency generally becomes actively involved with a property if there are, or have been, regulated activities at the site (e.g., underground tanks and/or waste generation, treatment, storage, or disposal of hazardous waste), if there is a potential threat to human health and safety and/or to the environment, or if there is potential for degradation of the waters of the state. Site investigations performed for the project may also trigger regulatory oversight.

Several regulatory agencies in California may have oversight over a particular site. At the local level these may include local cities, counties, and fire departments. At the state level these may include one or more Cal/EPA departments or boards such as the RWQCB, DTSC, or (in the case of landfills) CalRecycle. In some cases, there may be oversight at the federal level by US EPA.

CUPAs (local cities, counties, and, in certain situations, fire departments) have authority delegated by Cal/EPA including the authority to regulate USTs, hazardous materials management, and hazardous waste generation. These local entities perform inspections of regulated businesses and often order and oversee cleanup of minor releases of hazardous materials and hazardous wastes. Complex sites, especially those with groundwater contamination, are referred to the departments and boards of Cal/EPA.

In general, larger and more highly contaminated sites are more likely to be actively regulated than smaller sites with low levels of contamination. In some cases, however, small sites containing low concentrations of contamination may be regulated if the contamination at the site is considered part of a widespread regional groundwater plume. Examples of contaminants found in regional groundwater plumes in California include methyl tertiary-butyl ether (MTBE), solvents, per- and poly-fluorinated alkyls (PFOS, PFAS) and hexavalent chrome.

Regulatory Agencies

The following are federal, state, and local agencies that have regulatory authority over water quality, air quality, hazardous materials, hazardous waste, and contaminated sites.

US EPA

The US EPA's mission is to protect human health and to safeguard the natural environment. The US EPA delegated authority to the RWQCBs and DTSC in California. However, US EPA remains the lead regulatory agency on sites that are included on the NPL or in the event of a federal emergency response action.

Cal/EPA

There are three departments, two boards, and one office within the Cal/EPA "umbrella," thus creating a cabinet level voice for the protection of human health and the environment in California and assuring the coordinated deployment of state resources. Cal/EPA includes the SWRCB and the

individual RWQCBs, DTSC, CalRecycle, and CARB which are discussed below, as well as the Department of Pesticide Regulation and the Office of Environmental Health Hazard Assessment.

SWRCB

The SWRCB allocates water rights, adjudicates water rights disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine RWQCBs located in the major watersheds of the state.

RWQCBs

According to the SWRCB, "The mission of the Regional Boards is to develop and enforce water quality objectives and implementation plans that will best protect the State's waters, recognizing local differences in climate, topography, geology and hydrology." The RWQCBs regulate sites that impact, or have the potential to impact, the quality of both surface and groundwater. USTs are specifically regulated, but this authority is often delegated to local authorities such as cities, counties, and fire departments. The RWQCBs also issue NPDES permits under the federal CWA.

DTSC

DTSC is responsible for regulating hazardous waste facilities (facilities that generate, treat, store, or dispose of hazardous waste) and overseeing the cleanup of hazardous waste sites in California. In many cases the jurisdiction of the RWQCBs and DTSC overlap. In such circumstances either agency may be the lead regulatory agency, although DTSC generally has primary authority if the contaminants are defined as hazardous waste.

CalRecycle

The purpose of CalRecycle is to protect the environment and preserve resources by empowering Californians to reduce, reuse, and recycle. CalRecycle has authority to regulate landfills (including gas emissions and closure) and may delegate some authority to local enforcement agencies (cities and counties).

CARB

CARB oversees all air pollution control efforts in California, including the activities of 35 independent local air districts. CARB works in cooperation with the local air districts and US EPA on strategies to attain federal and state ambient air quality standards and reduce air toxics emissions.

California Local Air Districts

The California Local Air Districts provide information on air quality, handle local air quality permits, and ensure compliance with permit conditions and air quality rules and regulations. They are either called Air Pollution Control Districts (APCDs) or Air Quality Management Districts (AQMDs).

CUPAs - The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. The state agencies responsible for these programs set the standards for their programs while local governments implement the standards. Cal/EPA oversees the implementation of the program as a whole. The Unified Program is implemented at the local level by CUPAs, 84 government agencies certified by the Agency Secretary of Cal/EPA. These CUPAs have

typically been established as a part of a local environmental health or fire department. Some CUPAs also have contractual agreements with one or more other local "participating agencies" (PAs) which implement one or more program elements under the oversight of the CUPA. To find a specific local [CUPA Directory Search website](#) .

When to Talk to Your Regulators

Speak with your regulators:

- Early in the various stages of project planning and delivery when there is a regulated site within the proposed project footprint;
- When contaminated sites or properties are identified on a proposed project alternative;
- Upon discovery of a previously unknown contaminated site or property;
- When regulatory oversight may impact project feasibility, cost, or schedule;
- When an alignment crosses a high-risk site or property such as a landfill;
- When it is necessary to coordinate the project schedule with the schedule of potential regulatory activities; and
- Before acquiring (purchase of fee title or easement) contaminated property.

When meeting with regulatory agencies it is important to bring all relevant and available information about the transportation project to the meeting as well as information about the contaminated site(s) or property(ies) of concern, if the agency does not already have this information in their own files. The level of detail available will depend on the phase of the project.

Examples of information to bring are:

- Site location - including map(s);
- Current land uses;
- All available site investigation reports (if not on file with the agency);
- Depth to groundwater and proximity to surface water;
- Project design - indicate whether cut or fill depths, or both, and include drainage plans, utility relocations, and the likelihood of encountering and impacting groundwater; and
- Project timeline.

Further References

Listed below are additional information sources.

- **District Hazardous Waste Technical Specialists (DHWTs)** are familiar with laws and regulations, Caltrans policy and procedures, and with local regulatory agency personnel and policies. They are also a useful resource for background and/or historical information in many project areas. A list of Caltrans District Hazardous Waste Technical Specialists can be found on the Division of Environmental Analysis intranet.
Division of Environmental Analysis, Hazardous Waste, Air, Noise, and Paleontology Office: The headquarters Hazardous Waste, Air, Noise, and Paleontology Office maintains an intranet and external website with information specifically related to hazardous waste laws, regulations, policy, and procedures. Caltrans staff can access the intranet. Non-Caltrans staff can visit the [external website](#) .
- **National Council for Science and the Environment (NCSE):** The National Council for Science and the Environment is a not-for-profit organization dedicated to improving the scientific basis for

environmental decision-making. The Council specializes in programs that foster collaboration between diverse institutions, communities, and individuals. The Council works closely with those creating and using environmental knowledge, including research, education, environmental, and business organizations, as well as governmental bodies at all levels.

- **Underground Storage Tanks:** USTs are a very common concern for transportation projects. For convenience, links to the specific laws and regulations pertaining to them are included here:
 - Statute regarding underground storage of hazardous material ([Health & Safety Code Sections 25280 et seq.](#))
 - Regulations regarding underground storage tanks ([California Code of Regulations \(CCR\) - Title 23, Division 3, Chapter 16](#))

Process and Procedures

The process of compiling accurate information regarding hazardous materials, including hazardous wastes and contamination, for any transportation project includes performing:

- Project screening to identify hazardous materials/waste sites in the project area;
- An Initial Site Assessment (ISA), if necessary, to identify if significant risk and impact from hazardous materials/wastes are likely present in the project area;
- Scheduling subsequent studies on specific alternatives if already defined, for confirmation and investigation of possible contamination identified during the project screening;
- A Preliminary Site Investigation (PSI) to confirm the presence of contamination when the project screening or ISA identifies that potentially contaminated sites or properties are present; and,
- A Detailed Site Investigation (DSI) to determine the source, nature, and extent of contamination and quantify the risk and impact of a contaminated site or property on the cost, scope, and schedule of the transportation project and identify appropriate avoidance, minimization, and/or mitigation measures.

The above activities must be integrated with the project delivery process for the project.

If the project is on the State Highway System (SHS), project screening and the ISA are always performed and form the foundation for completion of the Preliminary Environmental Analysis Report (PEAR). For projects off the SHS, project screening is performed in order to complete the Preliminary Environmental Study (PES) form (See Local Assistance Procedures Manual Forms, Chapter 6), and the ISA is scheduled as a separate activity. In both instances (SHS and Local Assistance projects), all ISA work must be completed early enough to supply adequate information for the environmental document/determination. For additional details regarding the environmental component of the project delivery process, as well as associated forms and templates, refer to the Standard Environmental Reference Home Page.

Project Screening and Scheduling of Subsequent Studies

During the Project Initiation Document (PID; K) phase, the DHWTS and environmental generalists screen the project for the potential to encounter hazardous materials, hazardous waste, and contamination. This screening is conducted to determine if an ISA is necessary during the K phase. The initial project screening utilizes an abbreviated ISA format called the ISA Transaction Screen (ISA-TS) developed by Caltrans that is based on the ASTM International (ASTM) E 1528-14 Standard Practice for Environmental Site Assessments: Transaction Screen Process. An ISA is conducted during PID if this project screening or prior knowledge identifies the presence or likely presence of hazardous materials, waste, or contamination within or adjacent to the alternative. The ISA forms the basis to determine assessing the need for subsequent invasive studies (the PSI and DSI). For projects off the SHS, local agencies, or their consultants perform the screening and document it on the PES form.

Project Screening

Project screening activities generally include the following:

- Project evaluation;
- Caltrans record review;
- Regulatory agency record review; and
- Field visit.

If there is a potential for contamination within the project footprint, the risk posed to the project is evaluated during this screening process to provide input to the Project Delivery Team (PDT) and allow adjustment of the project schedule and resources. If the screening identifies significant risk, the project footprint should be revised to eliminate this risk before moving forward.

Project Evaluation

Project evaluation begins with determining the project scope and necessary project activities. If the project scope includes one of the following, an ISA is necessary:

1. Acquisition of new right of way
2. Project activities include soil or structure disturbance including, but not limited to, excavation, drilling and boring, including for geotechnical studies, structure demolition or modification, or other earth-moving activities, etc.

When one of these conditions exists for a local agency project, document the need for an ISA under Section B of the PES form.

The nature of the project will control how extensive activities to identify hazardous materials, hazardous waste, and contamination need to be and what they will include. For example, a project not involving acquisition of new right of way, structure demolition or modification, or excavation of any kind may not require extensive evaluation; however, even in this case, the DHWTS must still be consulted in order to evaluate the potential for hazardous materials and hazardous waste issues (e.g., lead based paints, asbestos containing materials, etc.).

When a project is very limited in scope, such as repainting of a structure, an ISA may not be needed, but a limited, specific focused site investigation may still be necessary to ensure worker health and safety during construction.

The timing of the ISA depends on the level of risk (see Scheduling Subsequent Studies - Risk Table below) that potentially contaminated properties may pose to the project. For example, high-risk properties or sites can make a project alternative nonviable, therefore sufficient detail to support realistic cost estimates, risk assessments, and resulting adjustments to the transportation project schedule must be developed during the PID Phase (or, in the case of local assistance projects, by the time the Request for Authorization to Proceed Package is completed).

Caltrans Records Review

Utilize all available Caltrans records (and local agency records when appropriate) and confer with knowledgeable staff. For example, Right of Way records may have information about past land uses. Maintenance may have records of chemical spills along the SHS within the project study area. As-builts may show structures of concern such as underground storage tanks or the proximity of the highway to nearby suspect properties such as mining and mill sites. As of July 2010, Caltrans began maintaining a Geographical Information System (GIS) based mapping tool to track locations where soils containing aerially deposited lead (ADL) were placed in accordance with the variance and the subsequent ADL Agreement issued by DTSC. This GIS tool on the DEA intranet site must be checked to determine whether proposed projects have the potential to disturb these soils. The DHWTS may have specific knowledge about property conditions because of work on other projects. This review should also include current and historic aerial photographs, fire insurance maps and/or local street directories, and other historical use sources, as necessary, for evidence of past land uses.

Regulatory Agency Records Review

Research regulatory agency records for the properties that are within the project alternatives. The DHWTS should initially review the SWRCB Geotracker online GIS database of active and recently closed sites regulated by RWQCBs, and the DTSC Envirostor system used to document their regulated hazardous waste sites. US EPA maintains a similar system that may capture federally regulated sites that are not identified by the SWRCB or DTSC systems.

Frequently these resources are supplemented with a report obtained from a private vendor who prepares a technical study that evaluates properties within and adjacent to the project area. The report is compiled from information from Federal, State and local regulatory agencies, fire departments and business agencies. Sites identified include reported leaking underground storage tank (LUST) sites, registered tanks, waste generators, business records, and sites on the Hazardous Waste and Substances Sites (Cortese) List. The Cortese List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites.

It is important to obtain this information early in the process. In urban areas, it is more appropriate to immediately obtain the vendor report as it will typically capture more regulatory records than may be available from Geotracker and Envirostor. This information is particularly important because when a site or property within the project boundaries is on the Cortese List, California law prohibits the use of a Categorical Exemption (CE). The regulatory records report will be incorporated into the ISA if one is necessary. This vendor report does not solely suffice for the screening document or the ISA but can identify early in the project screening whether an ISA must be conducted during this phase.

Field Visit

The field visit for project screening may be as minimal as a windshield survey if the property is uniform and featureless or as extensive as walking through the area and making visual observations of all accessible properties. In some instances, it may be possible to use Caltrans' drone support to provide observations of the subject parcels without setting foot within the parcel boundary. In all cases, all observations must be well documented in field notes. Please contact the unmanned aircraft systems (UAS) group for further guidance on the use of drones for field observation.

Scheduling of Subsequent Studies

If there is the potential for contamination within the project footprint, the potential risk posed to the project is evaluated during the screening process so that input can be provided to the Project Delivery Team (PDT) and the project schedule and resources adjusted and supplemented to accommodate the required subsequent studies.

Different types of land uses have differing levels of risk for site contamination and related impacts to a transportation project. Additionally, certain types of non-hazardous materials found on a property may impact the project because there are special handling requirements necessary as part of project delivery activities (e.g., NOA is not a hazardous waste, but requires special handling). The timing of the ISA, PSI, and DSI must be based upon the level of risk a property or site may pose to the cost, scope, and schedule of the transportation project.

Parcels identified as high or medium risk must be evaluated with a PSI or DSI earlier in the project delivery process if insufficient information is available to determine cost, scope, and schedule impacts or develop avoidance, minimization, and/or mitigation measures for the environmental document. The higher the risk, the earlier the investigation steps should be taken in the project delivery process. For example, since high-risk properties or sites can make a project alternative nonviable, information detailed enough to support realistic cost estimates, risk assessments, and resulting adjustments to the transportation project schedule must be developed during the PID Phase (or, in the case of local assistance projects, by the time the Request for Authorization to Proceed Package is completed). In addition, if there are multiple properties or sites of any risk level located within the project footprint, the cumulative risk to the project may be elevated necessitating earlier assessment and investigation.

After project screening, at each subsequent step of the process (ISA, PSI, DSI) the risk posed to the project by any individual property, site, or combination of properties and sites, must be reassessed and the schedule of subsequent studies and the schedule of the entire project adjusted accordingly.

As stated in Chapter 6 of the Local Assistance Procedures Manual, "Local agency(ies) shall not commence with any required technical study until after the PES Form has been fully signed by all signatories." Therefore, for local agency off-SHS projects, work on an ISA shall not begin until Caltrans signs the PES form. The local agency may request an early coordination meeting through the District Local Assistance Engineer (DLAE), prior to developing a consultant contract for the ISA. The following information (needed to conduct an ISA) should be assembled prior to the meeting:

- Site location - provide maps;
- Current land uses;

- Project design - indicate whether cut or fill, or both, and whether or not groundwater is expected to be impacted if known;
- Project timeline; and
- Initial Site Assessment Request Form.

Scheduling Subsequent Studies - Risk Table

The following lists contain examples of land uses and conditions that have the potential to produce or cause site contamination and materials that require special handling. This list is grouped into high, medium, and low risk categories. This list is not all inclusive and does not preclude completion of the PSI or DSI for any parcel if a property use is listed as high or medium risk.

High-risk sites and properties should eliminate alignment alternatives from consideration due to their high likelihood of hazardous materials, hazardous waste, or contamination and the insurmountable impacts they may have on the project cost, scope, and schedule, and the associated risk of future liability to the state. If an alternative with a high-risk site cannot be eliminated or the parcel avoided, then the PSI and DSI must be conducted to fully evaluate cost, scope, and schedule impacts and identify avoidance, minimization, and/or mitigation measures.

If high or medium risk parcels are present within the project limits, the DHWTS must prepare a justification on why the parcel cannot be avoided or the project redesigned to avoid the parcel(s). This justification may become part of a future request for acquisition of contaminated property process under the Caltrans directive PD-02-R1 and, therefore, a detailed explanation is necessary.

Examples of land uses/conditions that pose a high risk to project cost, scope, and schedule include:

- Superfund Sites
- Sites Under Investigation and/or Remediation
- Airports
- Automotive Maintenance Facilities
- Bulk Fuel Facilities
- Chemical Manufacturing Plants
- Chemical Storage and Blending Facilities
- Computer Manufacturers
- Department of Defense Facilities (including UXO areas)
- Dry Cleaning Facilities
- Electrical Utility Generation/Transfer Facilities (including transformer yards)
- Gas Stations with Underground Storage Tanks (with documented release and/or closure under the SWRCB Low Threat Closure Policy where residual contamination remains)
- Geothermal Power Plants
- Industrial Property (with greater than 20 years of use and/or with apparent poor materials management practices)
- Junk Yards
- Landfills
- Metal Plating Shops
- Paint Manufacture/Application Facilities (automotive or other)
- Pesticide/Herbicide Mixing and Disposal Areas on Agricultural Properties
- Railroad Yards
- Recycling Centers

- Refineries
- Sandblasting/Leaded Glass Assembly or Repair Facilities
- Shipyards

Examples of land uses/conditions that pose a medium risk to project cost, scope, and schedule include:

- Above Ground Storage Tanks
- Asbestos in buildings
- Crop Dusting Operations
- Debris Laden Fill
- Industrial Property (with documented use of less than 20 years, and with apparent good best management practices)
- Lead based paint on buildings
- Lumber Mills
- Mines/Quarries
- Non-Chapter 15 Surface Impoundments (Discharges of wastewater to land are commonly called "Non-Chapter 15" or "Non-15" discharges, in reference to the group of wastes excluded from the full containment, prescriptive requirements of Chapter 15/Title 27 that apply to hazardous, designated and other wastes.)
- Operating Gas Stations (with no documented release and clear operating history)
- Railroad Lines
- Shooting/target Ranges

Examples of land uses/conditions that posing a low risk to project cost, scope, and schedule include:

- Aerially Deposited Lead (ADL)
- Asbestos in bridges, retaining walls, etc.
- Agricultural Fields
- Lead based paint and other lead containing materials on bridges, retaining walls, etc.
- Naturally Occurring Asbestos
- Treated wood

Initial Site Assessment

If a project requires acquisition of new right of way, structure modification or demolition, excavation, or the initial project screening identifies that high or medium risk properties are present, an ISA is required. A summary of the information in the ISA is included in the PEAR prepared as part of the PID for projects on the SHS.

The ISA identifies potential or known hazardous materials, hazardous waste, and contamination in the project area as well as the party(ies) responsible, or potentially responsible, for hazardous waste and contamination. This information is used to evaluate alternatives, make decisions about project design, cost, scope, and schedule, and used as a baseline against future claims.

An ISA includes a record search, field visit, and historical research on past project area land uses to identify potential sources of contamination. The field visit may be as minimal as a windshield survey if the property is uniform and featureless or as extensive as touring the property with the owner, but it is always non-invasive. A drone survey may be used to identify potentially hazardous materials/waste use, storage, and disposal areas.

Based upon the research and field observations, the ISA includes a recommendation regarding whether a PSI should be performed and makes specific investigation recommendations. In general, if the ISA identifies a potentially contaminated property or site, then a PSI is necessary unless adequate site investigation has already been completed by another party such as a property owner, RP, or regulatory agency, and the collected data is publicly available.

The industry standard for preparing an ISA is found in the American Society for Testing and Materials (ASTM) Standard E1527-13 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (Note: ASTM standards are only available by purchase through ASTM and the HQ Caltrans library has the most up-to-date ASTM standards). Local agencies managing projects on the SHS follow the ASTM E1527-13 standard. It is also strongly recommended that local agencies managing projects off the SHS follow ASTM E1527-13. Local agencies will use the information gathered in the ISA to answer questions pertaining to hazardous materials on the PES form (See Local Assistance Procedures Manual Forms, Chapter 6).

Requirements for ISAs performed or managed by Caltrans DHWTS are outlined in the Caltrans Initial Site Assessment Guidance Document found on Caltrans' intranet. (Note: Since this guidance is only for projects prepared by Caltrans staff, the intranet is only accessible inside the Caltrans firewall. Others should follow the ASTM E1527-13 standard).

Elements of an ISA

ISA activities generally include the following:

- Interviews with past and present owners, operators, and occupants;
- Review of historical sources of information, such as aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records;
- Review of government records, including regulatory reports for both the subject properties and nearby or adjoining properties;
- Visual inspection of the subject properties and of adjoining properties; and
- Documentation of research, observations, and results of the environmental inquiry in a written report that specifically identifies any properties that will require invasive site investigations.

Regulatory Reports Reviewed for the ISA

When there is regulatory oversight of a contaminated property or site, RPs (property owners and/or the entities responsible for possible contamination) are required to prepare several types of documents. Also, facilities that store and use hazardous materials and those that generate, treat, store, or dispose of hazardous waste are periodically inspected and the regulatory agencies prepare inspection reports. These documents are found in the public files of the regulatory agencies and provide critical information for a project's development and delivery process. Individual regulatory agencies have their own protocols for accessing their files. Some data are available online while others can only be accessed by making an appointment to visit a file room. Some examples of regulatory documents to review are:

- Preliminary Environmental Assessments (PEA)
- Facility Inspections
- RCRA Facility Inspections (RFI)
- RCRA Facility Plans (RFP)

- Site Investigation Reports
- Remedial Investigation/Feasibility Studies (RI/FS)
- Quarterly Groundwater Monitoring Reports
- Human Health and/or Ecological Risk Assessments
- Sensitive Receptor Surveys
- Remedial Action Plans (RAP)
- Remedial Action Workplans (RAW)
- Corrective Action Plans

ISA Report

The ISA report must contain a description of the work performed, any deviations from normal ISA procedures, a summary of findings, the opinions of the preparer regarding the property or site, data gaps, additional investigation and services recommended, conclusions, and recommendations. Sources of information must be clearly referenced.

The ISA report must include sufficient information to estimate the cost, scope, and schedule impacts of identified sites. The ISA report will identify properties needing right of way support for access for a PSI or DSI at the start of PA&ED (0 phase).

ISA Preparer Qualifications

Caltrans DHWTS are qualified to and may prepare simple ISAs using the Caltrans ISA Guidance for internal use by Caltrans, but generally a contract with environmental consulting firms using a district's on-call contract is necessary for large projects.

Local agencies should refer to the qualification requirements in ASTM E1527-13 when selecting an environmental professional to perform the ISA.

Timing of the ISA

The ISA should be performed during the PID phase (K Phase) of the project development process (for projects off the SHS the ISA is performed after completion of the PES form). The greater the potential risks are to the project and Caltrans, the earlier the ISA should be performed. The project screening can identify whether the ISA must be advanced into the early stage of the PID phase. If the only potential hazardous waste or contamination issues identified during project screening are clearly low risk to Caltrans and to the scope, cost, and schedule of the project, the ISA may be performed later in the process. However, remember that all activities must be scheduled to ensure that adequate information is available to provide remediation cost estimates, project impacts, and avoidance, minimization, and/or mitigation measures at the time of the preparation of the environmental document.

ISA Updates

Property conditions can change quickly. Underground storage tanks that were intact a year ago can begin to leak. An industrial facility can have a chemical spill at any time. Previously unused properties can be sold or rented. Unused properties can attract squatters or dumping. As a result, any ISA over one (1) year old is considered out of date and must be re-evaluated and updated as needed.

Site Investigations – PSI and DSI

If the ISA identifies potentially contaminated sites or properties, the available information must be evaluated to determine whether it is adequate to estimate risk to Caltrans and impacts to the project cost, scope, and schedule. Specifically, determine whether there is enough information to adequately estimate remediation (clean up) costs to support the evaluation of alternatives and identification of avoidance, minimization, and/or mitigation measures for each contaminated property in an environmental document.

If the available information is not adequate to meet all these needs, a site investigation (PSI and DSI as needed) is required. The results of these investigations will be used to prepare the hazardous waste section of the environmental document. The PSI and DSI reports are technical studies that provide the information for and support the conclusions of the environmental document.

The PSI typically consists of sampling or investigation to confirm whether suspected contamination identified in the project screening or in the ISA is present on the property. The PSI may include activities such as geophysical surveys, drilling, trenching, soil sampling, soil gas sampling, groundwater sampling, and surface water sampling. The media sampled, the sampling methods, sampling locations, and laboratory analyses performed are based upon the information collected in the ISA. The work is performed by qualified and registered consultants (i.e., California Professional Geologist and/or California Professional Engineer depending on the work to be done) with experience in contaminated site investigation overseen by the DHWTS, or in the case of a local assistance project, the local agency. All laboratory analyses performed to support the PSI must be done by facilities certified under the State Water Resources Control Board's Environmental Laboratory Accreditation Program (ELAP). The laboratories must be certified for the specific analyses run and the certification must be current (all appropriate inspections and tests passed, not pending).

The qualified consultants who perform the PSI must be familiar with industry standard site investigation methodologies. Procedures followed in the field and in the lab must ensure data quality and provide defensible reports. Information about field procedures acceptable to regulatory agencies can be found in DTSC publications and in guidance on the Caltrans Hazardous Waste Guidance intranet. The local CUPA and RWQCB may also have specific guidance. Laboratories qualified to perform appropriate analyses for an investigation must have a current Environmental Laboratory Accreditation Program (ELAP) certificate on file with the State Water Resources Control Board. Analytical test methods for suspected hazardous wastes are listed in US EPA's "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods" (commonly referred to by its document number, "SW-846").

If the PSI indicates contamination that may impact the project is present, but does not adequately delineate it, then a DSI is necessary. A DSI determines the source, full nature and extent of contamination so that remediation costs, impacts to project scope and schedule, and future liability to the state can be realistically estimated. Remember, this information is critical to support the analysis of alternatives in the environmental document.

The DSI must determine whether contamination extends beyond property lines as adjacent properties are potential sources or recipients of contamination which will control the risk to the project and Caltrans. As with

the PSI, the DSI work is performed by qualified and registered consultants (i.e., California Professional Geologist and/or California Professional Civil Engineer depending on the work to be done) with experience in contaminated site investigation overseen by the DHWTS, or in the case of a local assistance project, the local agency. All laboratory analyses performed to support the DSI must be done by facilities certified under the California Department of Public Health's Environmental Laboratory Accreditation Program. The laboratories must be certified for the specific analyses run and the certification must be current (all appropriate inspections and tests passed, not pending).

Be aware that, depending on the type and concentration of a contaminant, soil contamination discovered may simply require special handling and/or disposal during construction or may require an extensive remediation with regulatory oversight.

If groundwater is contaminated, regulatory agencies will require either a cleanup plan or long-term monitoring, depending on the severity of contamination. In the case of fuels, the presence of free product, such as gasoline, is cause for a cleanup (remediation) plan while the presence of low concentrations of some of the constituents (e.g., benzene, toluene, ethylbenzene, or xylene) may only require long-term quarterly monitoring.

The proximity of sensitive receptors to the site requiring remediation can also complicate remediation methods and increase cost or impact schedule. For example, a school or hospital adjacent to the site may necessitate special precautions or alternative remediation methods.

The impact that soil and groundwater remediation and/or long-term monitoring would have on the cost, scope, and schedule of the transportation project and Caltrans' liability must be evaluated in the environmental document so that alternatives can be fairly compared.

In the case of building remodeling or demolition, there are special considerations. The location and extent of materials, such as asbestos and lead based paints, can significantly impact the cost, scope, and schedule of the project.

Permits

A Permit to Enter will be required when performing investigations on private property. Similarly, special authorizations are generally required when operating on lands administered by federal (e.g., United States Department of the Interior, Bureau of Land Management; United States Department of Agriculture, Forest Service; and United States Department of Defense, Army Corps of Engineers) and state (e.g., California Department of Parks and Recreation) land managing agencies. Note that permits from these agencies may also be required in cases where the existing roadway is an easement or prescriptive right of way (i.e., Caltrans has anything less than fee simple title).

Counties generally require permits to drill during site investigations. Caltrans is required to get county permits. Counties use the permit process to ensure proper grouting of boreholes, document borehole and well locations, and ensure drilling is not in contaminated areas. This is of particular concern when groundwater may be encountered. Counties also use the subsurface information collected to protect local groundwater resources.

District Right of Way support for access must be obtained as soon as the ISA identifies that hazardous materials/wastes are possibly present within the project limits. Access must be obtained before entry is possible to conduct

the PSI and DSI.

Site Investigation (PSI and DSI) Reports

For Caltrans staff, detailed discussion of the format and content of investigation reports is provided in the "Environmental Reporting" guidance document on Caltrans' Hazardous Waste Guidance intranet.

All site investigation reports should, at a minimum, include the following information:

- Site Investigation Project Description - A description of the objectives and activities of the investigation, all contacts with regulatory agency personnel and regulatory agency input on work plans, and a summary of previous investigative and remediation site work;
- Site Background - A thorough discussion of the site geology, hydrogeologic conditions observed during the investigation, and extent of soil and groundwater contamination known prior to the current investigation;
- Data Evaluation and Discussion - Compilation and discussion of the site investigation results including impacts to the environment, potential impacts to human health, potential liability, and health and safety concerns. The data to be presented includes, but is not limited to:
 - Maps illustrating the site, physical features, boring locations, well locations, and contaminant distribution(s);
 - Cross sections of subsurface geology and hydrologic conditions, including chemical results exceeding detection limits;
 - Tabulated chemical data in all media sampled; and
 - Summary of laboratory results.
- Conclusions and Recommendations - Documentation of the findings of the investigation, the potential impacts of the contamination to the planned transportation project, any further steps necessary to adequately assess the contamination, and mitigation issues to be considered if the contaminated property or site is included in the transportation project; and
- Appendices - Compilation of all data collected or used to support the report.

In most cases, site investigation reports of properties not owned by Caltrans do not require regulatory agency approval. However, report review by a regulatory agency may aid Caltrans in getting property owners to clean up their property or site prior to acquisition.

For some sites, other related specialty studies may be needed to support the environmental document or may be required by a regulatory agency.

Examples of these additional studies are:

- Remedial Actions Options Reports - A review of all potentially feasible remedial actions and their costs;
- Sensitive Receptor Surveys - Identifies domestic wells likely to receive contaminated water;
- Quarterly Monitoring Reports - An evaluation of groundwater quality generally performed every three months; and
- Human Health and/or Ecological Risk Assessments or Risk Based Correction Action (RBCA) - Assessment of contamination impacts on human health and risk to local plant and animal life.

PSI and DSI Preparer Qualification

Depending upon the details of the work to be done, PSI and DSI efforts must be conducted by a California Professional Geologist (PGs) and/or California Professional Civil Engineer (PEs), with experience in contaminated site investigation. Lead based paint issues must be evaluated by Certified Lead Assessors. Asbestos inspectors must be Asbestos Hazard Emergency Response Act of 1986 (15 USC) (AHERA) certified and be Cal/OSHA Certified Asbestos Consultants. Regulatory agencies may have additional requirements specific to an individual regulated site. Site investigations are performed for Caltrans by on-call consultants at the direction of the DHWTS and with approval of the Project Manager.

Timing of Site Investigations (PSI and DSI)

Conduct both PSI and DSI of properties with high and medium risk land uses or conditions as early as possible but before preparing the environmental document. Identifying high and medium risk contaminated properties and sites early in the process will allow avoidance and better alternative evaluations and time for redesign to avoid, minimize, and/or mitigate the risk. In most cases this will be early in the PA&ED phase of the project, although the information may be needed even earlier. Keep in mind that a high-risk property or site such as a landfill or a state or federal Superfund site likely will cause an alternative to be infeasible. As a result, detailed information sufficient to develop realistic project schedules, cost estimates, and risk assessments may even need to be developed during the PID Phase. Subsurface information is required to develop these estimates and assessments, which will necessitate that a Caltrans (or local agency, if appropriate) initiated PSI be conducted unless the information is already available from prior studies performed by landowners, RPs, or regulators.

During the PA&ED phase, perform both PSIs (if they have not already been completed) and DSIs for high-risk sites and properties. Complete these investigations as early as possible. Also complete PSIs and DSIs for medium-risk sites and properties during PA&ED. Completing these investigations during PA&ED is necessary to ensure that the environmental document includes full public disclosure as well as allowing management to make fully informed (and thus legally defensible) decisions as a part of the project delivery process. Additionally, it provides the requisite basis for accurate project cost and schedule input for the project. The latter also helps prevent repeated requests to the California Transportation Commission (CTC) for supplemental votes of funds.

Site investigations for low risk sites and properties can be performed when convenient and may be delayed until PS&E if, and only if, adequate information to estimate impacts to cost, scope and schedule is already available to include in the environmental document and there will be sufficient time to complete the investigations.

The length of time that site investigations take to complete must also be considered when scheduling the work for PSI and DSI and the project as a whole. Site characterization can take anywhere from a month to a year or more. The time involved in collecting and interpreting data for a site will vary depending on the size, history, geology, source and type of contamination, and regulatory oversight of the site. For example, sites that involve a small area (e.g., about two acres) with the probability of lead in the soil may take a couple of days to sample, two weeks to get analytical results, and a few weeks to generate a report, for a total of six weeks of project time. However, a site, that is complicated and involves regulatory oversight, can take years to evaluate.

Regulatory oversight typically happens at sites that have releases that threaten groundwater or human health. These sites require drilling activities and usually the construction of monitoring wells. Sites may also require multiple investigations to fully delineate the extent of contamination. Since sites with regulatory oversight must have workplans, health and safety plans, and reports reviewed by the regulatory agency, significant amounts of time are added to the amount of elapsed time for final characterization. The amount of time needed for review will depend upon the staffing and workload of the regulatory agency. Contact the regulatory agency to get estimates of the amount of time they will require for document reviews.

Structure Investigations: When structures, such as buildings or bridges, will be repainted, repaired, modified, or demolished, investigation for lead based paint, asbestos, and other hazards is required. Investigation for mold may also be necessary in buildings when there is a history of leakage (roof, windows, plumbing, etc.). As with all site investigations this work is overseen by the DHWTS or in the case of a local assistance project, the local agency.

Conditions, such as lead based paint and asbestos in buildings, usually pose a medium risk to project cost, scope, and schedule because the information collected in the investigation of the structure may be needed to determine whether a building can be renovated or must be demolished. As a result, the site investigations for buildings should be done as a part of PA&ED so that alternatives can be properly evaluated. This also allows for appropriate design consideration and funding.

The information collected in the site investigation is also vital for both waste management and health and safety concerns and therefore must be available before beginning the PS&E process. This will ensure that all required information is readily available for preparation of appropriate specifications. Specification development for buildings is often complex, especially when modification work will be performed in an occupied building and lead, asbestos, or other hazards are present.

Conditions such as lead based paint and asbestos on bridges usually pose a low risk to project cost, scope, and schedule because their presence or absence is unlikely to cause dramatic alteration of the project. As a result, site investigations of bridges can often be delayed until the beginning of PS&E. However, the information is vital for both waste management and health and safety concerns and therefore must be available early enough in the PS&E process to prepare appropriate plans and specifications.

Using the PSI and DSI Reports

If contamination on a high risk parcel is confirmed by the PSI or DSI the parcel must be avoided in compliance with Caltrans Policy. If the parcel cannot be avoided, then the DHWTS uses the information collected in the PSI and DSI to determine mitigation options, cost estimates, estimates of the schedule and duration for remediation and mitigation, and an estimate of regulatory involvement. Keep in mind that regulatory involvement in a remediation effort adds significant time and oversight costs to the overall cost of the project, as well as reduces Caltrans' (or local agency's) control over the project schedule. When evaluating site investigation information, also estimate Caltrans' (or local agency's) future liability resulting from ownership of the contaminated property. This liability may include responsibility for remediation derived hazardous waste that must be disposed of at a Class I landfill. The generator of this waste (either Caltrans or local agency), will become responsible for it in perpetuity, which means that if the Class I landfill operator can no longer maintain the landfill, Caltrans or the local agency will be one of the RPs required to do so.

All of the cost, scope, schedule, and liability concerns listed above are considered and used in the environmental document so that alternatives can be properly evaluated. The DHWTS prepares a memo that summarizes all findings of the site investigations (PSI and DSI). The memo explains the surface and subsurface conditions and includes mitigation options, an estimate for cleanup costs and duration, a resource estimate for additional investigations, an estimate of the liability that Caltrans (or the local agency) would accept by acquiring the property, and a recommendation on the viability of any project alternatives that include the high-risk site(s) and property(ies). Summaries of site investigation results, including needed clean-up measures and monitoring requirements, are included in the appropriate environmental document. (For additional guidance on environmental document types and their preparation, refer to the Standard Environmental Reference Home Page). Required mitigation and monitoring activities are documented in the Environmental Commitments Record (ECR). The DHWTS overseeing the work may write both the environmental document and ECR summaries, but if the environmental generalist or other personnel prepare them, the DHWTS must review the text for accuracy.

Project Design (PS&E)

Investigation of Low-Risk Sites and Properties

During PS&E (1 Phase) conduct site investigations for low-risk sites and properties that have not previously been addressed. For these sites and properties, adequate information to estimate impacts to cost, scope and schedule had to already be available from other sources at PA&ED to include in the environmental document. The site investigations conducted during PS&E should only be for the collection of additional information necessary to support the design work. Also prepare additional specialty reports as needed to fine-tune the remediation cost and schedule estimates for sites within the chosen alternative that cannot feasibly be avoided. Use the information that has been gathered to determine if remediation is necessary and who will remediate: Caltrans (or local agency, if applicable), property owner, or another RP.

PS&E Support

If it is determined that it is in the best interest of the state to perform remediation activities so that a transportation project can move forward, it will be necessary to make the remediation a project, obtain funding, and complete the remediation prior to construction of the transportation project. If this approach is not possible or reasonable in a given situation, remediation will occur as part of construction of the transportation project and standard special provisions (SSPs) or non-standard special provisions (NSSPs) must be prepared for the PS&E package. For Caltrans and locally sponsored projects on the SHS, these are usually prepared by the DHWTS with assistance from the District Office Engineer and other technical specialists as needed. For local assistance projects off the SHS these are prepared by the local agency or their consultants. When preparing special provisions for remediation and the management of contamination and hazardous waste, review and verify information from site investigation documents and consider the following:

- Project design and staging;
- Media in which contamination exists (soil, water, soil gas);
- Type of contaminants;
- Extent of contamination (dimensional limits) and its relationship to the construction work that will occur;

- Environmental pathways for migration of contamination;
- Control of contaminated groundwater and dust;
- Waste management and disposal;
- Regulatory approvals or permits;
- Worker health and safety; and
- Feasibility analysis of remediation strategies.

SSPs or NSSPs for lead exposure safety and the management of soil containing ADL are required for all projects involving soil excavation. Design staff must work closely with their DHWTS to determine the most cost-effective way to manage soil with elevated lead levels (ADL-contaminated soil) construction activities must be carefully evaluated and designed to properly manage ADL contaminated soil. This Agreement allows the reuse of ADL soil on the SHS as long as specific requirements are met and reporting to DTSC is performed. Local agencies must follow the ADL Agreement if the project is on the SHS. In these cases, Caltrans must provide oversight of all ADL related activities and review and submit all notifications to DTSC prepared by the local agency. Additional information about ADL and the ADL Agreement are found on Caltrans' "Contaminants and Waste" intranet. Information is also available to non-Caltrans staff at the

[Contaminants and Waste external website](#) .

[Chapter 18, of the Caltrans Project Development Procedures Manual \(PDPM\)](#)

, contains additional information regarding addressing contamination during project development and specifically during the design phase.

Right of Way Acquisition

All properties considered for incorporation into the State right of way are investigated for contamination. The DHWTS must identify and begin investigation of contaminated property in the PID or PA&ED phases of project development, because contamination is a risk to the cost, scope, and schedule of a project and may create long-term liability for Caltrans.

Contamination identification includes determining:

- type of contamination,
- extent of contamination,
- impacted media,
- impacted receptors, and
- regulatory framework.

Investigations must be conducted with appropriate regulatory agency oversight and concurrence.

Property acquisition activities (2 Phase) occur concurrently with the Design phase. It is Caltrans policy, as stated in Project Delivery Directive PD-02-R1 (Contaminated Property Acquisition) to:

- avoid the acquisition of contaminated properties,
- require responsible parties to accept responsibility for remediation when acquisition of contaminated property cannot be avoided, and
- obtain reimbursement from responsible parties when Caltrans must conduct remediation and/or monitoring.

The identification and evaluation processes described in this chapter are commonly used throughout the environmental consulting community and are consistent with regulatory requirements for characterizing properties

and sites. Properties and sites that may be included in the transportation project are first screened for current or past activities that involve(d) hazardous materials or properties with known contamination.

Each potentially contaminated property identified is further evaluated through the preparation of an ISA utilizing non-invasive investigative methods. ISA is Caltrans terminology for the industry standard Phase I Environmental Site Assessment. Properties identified in the ISA as having recognized environmental conditions or activity use limitations related to contamination, are further scrutinized through a PSI that includes actual sampling of media such as soil and water. Finally, a DSI, which includes more comprehensive and/or directed sampling, may be prepared to adequately estimate cost, scope, and schedule impacts and the risk of long-term liability resulting from acquiring a contaminated property. The screening, ISA, PSI, and DSI must all be completed before the Hazardous Materials/Waste section of the environmental document/determination can be prepared. The results of these technical studies are summarized with cost, scope, and schedule impact analysis provided in the environmental document/determination and project files (with associated technical reports) so that alternatives can be adequately evaluated.

The DHWTS documents the condition of properties considered for acquisition on the Hazardous Materials Disclosure Document - Acquisition (HMDD-A), Form ENV-0001-A and documents the level of risk/liability of the acquisition using Form ENV-0002 (Request for Acquisition of Contaminated Property). For more information on the procedure for using Forms ENV-0001-A and ENV-0002, see Guidance: Project Delivery Directive No. PD-02-R1 Request for Acquisition Contaminated Property in the Hazardous Waste intranet website.

Information regarding responsibility for management and funding of hazardous material remediation activities for special funded and jointly funded projects is found on the Caltrans Contaminated Properties intranet. This information is also available to non-Caltrans staff at the "Contaminated Properties" external website.

Construction

Contamination issues to be addressed during construction will be documented in the Environmental Commitments Record (ECR). As these issues are addressed, the ECR must be updated accordingly.

Even when all appropriate procedures to identify and characterize contamination have been followed, it is still possible that the SSPs or NSSPs prepared for contamination management during construction are found to be inadequate once construction begins. This can occur because it is not always possible to predict what will be found in the subsurface based on limited sampling. In these cases, the Resident Engineer should consult with their Environmental Construction Liaison/Coordinators (ECL) (list of ECLs is on the intranet), the DHWTS, and the Division of Environmental Analysis, Hazardous Waste, Air, Noise and Paleontology Office to develop a strategy and to prepare any needed contract change orders (CCOs).

Unanticipated Contamination

Even when all appropriate procedures to identify and characterize contamination have been followed, it is still possible to discover previously unknown contamination and hazards during construction activities. Contamination that is unknown until exposure and discovery during construction will require sampling and testing prior to removal from the site

and subsequent disposal. Health and Safety Code 25914.2 specifies that unanticipated hazardous substances (including hazardous waste) and/or asbestos encountered during construction cannot legally be tested and/or managed and removed by the prime contractor who discovered it. Hazardous substances and asbestos can only be managed by the prime contractor if this work was specifically included in the original contract documents. Therefore, a CCO cannot be used in these situations. Each District has an on-call Construction Emergency Response Contract (for use by Caltrans only) managed by the District Construction Office that can be accessed to have appropriate testing and disposal performed for Caltrans administered projects. Consult with the DHWTS who will coordinate with the Emergency Response Contractor on the scope of the investigation, characterization, and mitigation measures. Also see Section 7-1.06 Environmental Hazards and Safety Procedures of the Caltrans Construction Manual. Health and Safety Code 25914.2 also applies to all local agency projects. Therefore, they need to have a mechanism similar to the Caltrans Construction Emergency Contract available or be able to contract quickly on an emergency basis in order to avoid construction delays and their associated costs.

Note: these contracts are managed by the District Construction Office, not Headquarters. A list of current active contracts is available on the Construction Emergency Contracts intranet.

At the completion of construction, both the ECR and the Certificate of Environmental Compliance (CEC) should document completed actions, results, and any future/on-going reporting, monitoring, or remediation.

[View the Unanticipated Contamination Decision Tree \(PDF\)](#) |

[Unanticipated Contamination Decision Tree \(ADA version\)](#)

Property Disposal

There are three ways property can be disposed of: excess lands, relinquishments, and vacations. Property is disposed of as either complete parcels or as segments. For all property to be disposed of, hazardous materials and hazardous waste clearance procedures must be conducted as discussed below under [EDM and HMDD-D for Property Disposal](#) .

Excess Lands

There are three types of excess lands: inventory parcels, non-inventory parcels, and planning parcels. Each of these may be created in several ways (see Right of Way Manual, Chapter 16). Excess lands may be landlocked or uneconomic remnants no longer required for the right of way, down-scoped projects, superseded highway segments, route rescissions, route un-adoptions by legislative action, and lands decertified at the request of adjoining owners, or properties no longer required for operating purposes, such as maintenance facilities and material and disposal sites.

Relinquishments

A relinquishment is a conveyance of all rights, title and interest to a state highway, or portion thereof, to a county or city. Relinquishments may occur through legislative enactment, be superseded by relocation, or are collateral facilities, nonmotorized transportation facilities, or park-and-ride lots (see PDPM Chapter 25 and Right of Way Manual, Chapter 16). A number is given to each continuous segment of legislative deletion, superseded state highway,

or collateral facility proposed to be relinquished to a single local agency. A continuous segment includes all contiguous rights of way, including slope and drainage easements, and is given a single number.

Vacations

Unlike an excess land sale or relinquishment, a vacation means the complete or partial abandonment or termination of the public right to use a street, highway, or public service easement (see Right of Way Manual, Chapter 6). Because the easement is no longer needed for transportation purposes, the easement is vacated, and the use of the property returns to the underlying fee owner.

EDM and HMDD-D for Property Disposal

In order to clear property for disposal, the DHWTS evaluates the property to determine whether there are hazardous materials, hazardous substances, hazardous wastes, or contamination on or adjacent to the property to be disposed of. This evaluation provides full disclosure about deleterious conditions to those acquiring the property, establishes a baseline to protect against future claims based upon contamination, and ensures that Caltrans-generated contamination is properly addressed. The DHWTS is required to prepare an Environmental Disclosure Memo (EDM) and a Hazardous Materials Disclosure Document-Disposal (HMDD-D) ENV-0001-D form. The EDM is an abbreviated ISA and must be completed before the HMDD-D. The HMDD-D documents whether the property can be disposed of and if there are any restrictions to the property. More than one parcel or segment can be included in the EDM and HMDD-D, as appropriate.

Contamination on property can result from a variety of sources such as the activities of the previous property owner, accidental spills, vehicle and big rig truck collisions, illegal dumping, or migration of contamination from neighboring properties. The DHWTS must prepare an EDM and HMDD-D by reviewing Caltrans and regulatory records.

For the EDM, the DHWTS must review and document, at a minimum:

- Caltrans project files and databases.
- Caltrans maintenance records for spills and accidental releases.
- ISAs previously prepared for Caltrans and for non-Caltrans sites that could affect the property under consideration for disposal.
- ADL investigation reports.
- Route or facility as-builts for placed or buried ADL or NOA locations.
- California Geological Survey Mineral Hazards Maps.
- Regulatory databases such as State Water Resources Control Board GeoTracker and Department of Toxic Substances Control (DTSC) Envirostor.
- Visual observations either in person or using Google Earth Street View imagery.

The information gathered on environmental conditions of the property to be disposed of and surrounding properties is documented in the EDM. This information and documentation includes:

- Accurate description.
- Current and previous property use and condition.
- The presence of ADL or NOA in soil.
- ADL or NOA placed or buried by Caltrans.
- The condition of properties adjacent or near to the property such as gas stations, commercial/industrial sites, landfills, etc.

- Sites with regulatory closure and residual contamination.
- Current permitted underground storage tanks (not reported to have leaked), because undetected leaks may be present or may occur in the future.
- Utility easements and pipelines.
- Hazardous minerals such as NOA.
- Hazardous materials including treated wood, electronics, lead chromate striping and paint, lead based paint, and asbestos materials in structures.

In addition, the EDM must include, as attachments, right of way maps showing the property to be disposed of, GeoTracker and Envirostor screenshots of the surrounding properties, and regulatory reports, letters, and other documents about the property to be disposed of.

For excess land and vacations, information in the EDM may indicate the need for further research into regulatory agency files or other Caltrans records. If warranted, a PSI may need to be performed to determine the actual property condition. Conversely, relinquishments are provided as-is, based on the information provided in the EDM.

The Hazardous Waste, Air, Noise, and Paleontology (HWANP) Office has created an EDM template for Districts to use. Use of the template ensures consistency of assessments and disclosure in each District. In some circumstances, Districts may deviate from or modify the template as necessary, but significant changes to the template will likely need to be explained in the EDM.

The District prepares and is responsible for the technical content in the EDM, using the template. After the DHWTS or District hazardous waste supervisor approves and signs the EDM, the District sends the EDM and the HMDD-D to HWANP. HWANP will review and initial the EDM to confirm that the District has used the template and that HWANP has been notified. However, responsibility and primary approval belongs to the District. After HWANP initials the EDM confirming that HWANP has been notified, the District submits the EDM and HMDD-D to the District Right of Way Office.

The EDM is valid for one year. The EDM must be updated and re-submitted to the HWANP office for review if the disposal agreement (agreement) is not completed within one year. The EDM and any update is disclosed to the receiving local city or county before the transfer can occur or be presented to the CTC. The EDM is referenced in the agreement but is provided separately from the agreement. In other words, it is not attached to the agreement.

Disposing of contaminated property may only occur when the nature and extent of the contamination is identified in the EDM, is minimal and not a threat to public health and the environment, and is not required by a regulatory agency to be remediated.

The District uses the findings of its EDM to complete Form HMDD-D. The HMDD-D certifies one of the following conditions of each parcel or segment:

Condition 1. Based upon an ISA, the parcel or segment is considered free of significant hazardous materials and may be sold or exchanged.

Condition 2. Hazardous materials exist on the parcel or segment, but further cleanup is not required pursuant to state or federal law and the parcel or segment may be offered for sale with appropriate and full information disclosure regarding the nature and extent of the contamination and, if required, deed restrictions.

Condition 3. A hazardous waste site investigation report documenting the nature and extent of contamination and cleanup cost estimates for the parcel or segment has been completed, but cleanup is not required pursuant to state or federal law. The parcel or segment may be offered for sale with appropriate and full information disclosure regarding the nature and extent of the contamination and, if required, deed restrictions.

Condition 4. Hazardous Materials exist or may exist on the parcel or segment and further investigation or remediation is required, or other conditions exist that make disposal of the parcel or segment an unacceptable risk without adequate investigation. For this condition, the DHWTS must request a Category 2D Environmental Hold on the parcel or segment by attaching the HMDD-D form to Form RW1603, Application to Hold Excess Land. Once the condition has been mitigated and the parcel or segment becomes certified as Condition 1, 2, or 3, then the HMDD-D form may be updated, the Environmental Hold released, and the parcel or segment can be sold or exchanged.

Disposal of Caltrans property on which ADL contaminated soil was buried under the authority of the ADL Variance or the Caltrans-DTSC ADL Agreement can only occur if the receiving local city or county agrees in writing to manage and track the ADL contaminated soil in an equivalent manner to that required of Caltrans. The receiving party must record a land use covenant (LUC) pursuant to California Code of Regulations, Title 22, Section 67391.1 with the applicable county. The need for a LUC should be documented in the HMDD-D.

When remediation is warranted before a property can be disposed of (Condition 4), Caltrans resources to complete the remediation, including all support costs, must be included in the right of way portion of the project costs. In the event that work wasn't properly resourced, or the contaminated property is associated with a closed project, alternate resources will need to be acquired. It may be necessary to create a project for the sole purpose of designing and completing remediation before the parcel can be sold.

Maintenance and Owner-Operator Activities

Frequently, residual contamination remains on a property after the transportation project is complete. Contamination may be encapsulated, or remediation systems may need to operate until cleanup goals are met, which could take years. After goals are reached, the regulatory agencies may require long-term monitoring of residual contaminants to ensure that they do not migrate to sensitive receptors. Caltrans (or local agency) maintenance and owner-operator activities may be restricted at these locations. For example, monitoring wells must be protected from heavy equipment and engineered caps and encapsulated soils must not be excavated. Restrictions will remain in force until regulatory approval for removal of remediation systems and discontinuing monitoring is obtained. In the case of encapsulated soils or engineered caps, the restrictions are considered permanent. The purpose of these restrictions is to protect the remediation facilities as well as Caltrans (or local agency) maintenance personnel, the public, and the environment. Examples of facilities that may require restrictions include:

- Monitoring wells;
- Engineered caps over contaminated soil;
- Treatment systems; and
- Encapsulated soils.

In these cases, measures must be taken to ensure that maintenance and owner-operator activities do not disrupt the remedial measures that have been put in place. Therefore, these conditions must be documented in the ECR and CEC. It is also recommended that these conditions be documented on as-builts, in the Uniform File System, and in the project history file.

CEQA Considerations for "Non-Transportation Project" Activities

Caltrans may be required to perform site investigation and remediation activities which are not part of a transportation project (i.e., non-transportation project activities). In cases where these activities are required or ordered by a regulatory agency, the regulatory agency is responsible for preparation of the environmental document or determination. Since the required actions are only discretionary on the part of the regulatory agency, the regulatory agency determines the need for and accomplishes CEQA compliance, not Caltrans. In most instances regulatory agencies deem site investigation activities to not be subject to CEQA. However, they generally determine that remediation activities have a CEQA nexus. When the regulatory agency determines that there is such a nexus, they may prepare the necessary simple CEQA documents/determinations themselves. If a complex document is required, they may require Caltrans, as the party responsible for the remediation, to prepare it.

Acronym List

- ADL - Aerially Deposited Lead
- AHERA - Asbestos Hazard Emergency Response Act
- APCD - Air Pollution Control District
- AQMD - Air Quality Management District
- ASTM - American Society for Testing and Materials
- ATCM - Airborne Toxic Control Measures
- CAA - Clean Air Act
- CAL/OSHA - California Occupational Health and Safety Administration
- CARB - California Air Resources Board
- CCO - Contract Change Order
- CCR - California Code of Regulations
- CEC - Certificate of Environmental Compliance
- CERCLA - Comprehensive Environmental Response, Compensation, & Liability Act
- CIWMB - California Integrated Waste Management Board
- CTC - California Transportation Commission
- CUPA - Certified Unified Program Agency
- CWA - Clean Water Act
- DHWTS - District Hazardous Waste Technical Specialist
- DLAE - District Local Assistance Engineer
- DSI - Detailed Site Investigation
- DTSC - Department of Toxic Substances Control
- ECR - Environmental Commitments Record
- ELAP - Environmental Laboratory Accreditation Program
- FS - Feasibility Study
- GIS - Geographical Information System
- HMDD-A - Hazardous Materials Disclosure Document-Acquisition
- HMDD-D - Hazardous Materials Disclosure Document-Disposal
- ISA - Initial Site Assessment

- LUST - Leaking Underground Storage Tank
- MTBE - Methyl Tertiary-Butyl Ether
- NCSE - National Council for Science and the Environment
- NESHAP - National Emissions Standards for Hazardous Air Pollutants
- NOA - Naturally Occurring Asbestos
- NPL - National Priority List
- NPDES - National Pollution Discharge Elimination System
- NPL - National Priorities List
- NSSP - Non-Standard Special Provisions
- PA - Participating Agency
- PDPM - Project Development Procedures Manual
- PDS - Project Development Support
- PDT - Project Delivery Team
- PE - Professional Engineer
- PEA - Preliminary Endangerment Assessment
- PEAR - Preliminary Environmental Analysis Report
- PES - Preliminary Environmental Scoping
- PG - Professional Geologist
- PID - Project Initiation Document
- PSI - Preliminary Site Investigation
- PSR - Project Study Report
- RACP - Request for Approval of Acquisition of Contaminated Property
- RAP - Remedial Action Plan
- RAW - Remedial Action Workplan
- RBCA - Risk Based Correction Action
- RCRA - Resource Conservation Recovery Act
- RFI - RCRA Facility Inspection
- RFP - RCRA Facility Plan
- RI - Remedial Investigation
- RP - Responsible Party
- RWQCB - Regional Water Quality Control Boards
- SSP - Standard Special Provisions
- SWRCB - State Water Resources Control Board
- UAS - Unmanned Aircraft Systems
- US EPA - United States Environmental Protection Agency
- UST - Underground Storage Tank

(Last content update: 11/8/23, CD, RB, MF, TV)

Statewide Campaigns

- ▶ [ADA Access](#)
- ▶ [Adopt-A-Highway](#)
- ▶ [Amber Alert](#)
- ▶ [Be Work Zone Alert](#)
- ▶ [CAL FIRE](#)
- ▶ [Cal OES: Power Outage and Fire Recovery Resources](#)
- ▶ [California Climate Investments](#)
- ▶ [California Connected](#)
- ▶ [California Transportation Plan 2050](#)

▶ [Clean California](#)

▶ [Energy Upgrade](#)

▶ [Go Safely California](#)

▶ [HeatReadyCA.com](#)

▶ [Move Over Law](#)

▶ [REAL ID](#)

▶ [Save Our Water](#)

▶ [Stormwater Education Campaign](#)

▶ [Tenant and Landlord Resources](#)

▶ [Unclaimed Property](#)

[Back to Top](#)

[Accessibility](#)

[Privacy Policy](#)

[Conditions of Use](#)

[Register to Vote](#)

[!\[\]\(56549452e01ca28bdf2500ced9653143_img.jpg\) Facebook](#) [!\[\]\(235f8f87c36d896db1ddff2848125c86_img.jpg\) Twitter](#)

Copyright © 2024 State of California