2.10 Hazardous Waste/Materials

2.10.1 Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many State and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

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

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the California Health and Safety Code and is also authorized by the federal government to implement RCRA in the State. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of

contamination include Title 22, Division 4.5, Environmental Health Standards for the Management of Hazardous Waste; Title 23, Waters; and Title 27, Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

2.10.2 Affected Environment

This section is based on the *Initial Site Assessment* (ISA) (2017) for the proposed project as well as the ISA prepared for the State Route 133 Safety Improvement Project (2014).

2.10.2.1 Field Survey Methodology

On July 21 2017, a site reconnaissance visit was conducted, consisting of the observation and the documentation of existing conditions along and in the vicinity of the project limits of State Route 133 (SR-133) and the nature of the existing development within 0.25 mile of the project segment of SR-133. The reconnaissance-level site visit was limited to the exterior parts of properties proposed for acquisition as part of the proposed project.

Based on the reconnaissance site visit, no hazardous material was identified as potentially of concern within the existing SR-133 right-of-way. The proposed project would acquire three vacant parcels without the presence of significant contamination.

2.10.2.2 Results of the Initial Site Assessment

Hazardous Substances Drums and Other Chemical Containers

No hazardous substances drums or other chemical containers were observed in the construction area within the existing SR-133 right-of-way or the parcels to be acquired.

Storage Tanks

No aboveground or underground storage tanks were observed in the construction area within the existing SR-133 right-of-way or the parcels to be acquired.

Polychlorinated Biphenyls

No pad- and pole-mounted electrical transformers were observed in the construction area within the existing SR-133 right-of-way or the parcels to be acquired.

Staining, Discolored Soils, and/or Corrosion

No staining, discolored soils, or corrosion were observed within or near the existing SR-133 right-of-way or at the parcels to be acquired.

Aerially Deposited Lead

SR-133 was constructed prior to 1965 and has been heavily traveled. The soil in unpaved or paved areas might be contaminated with the lead from vehicle emissions. Therefore, the potential for lead contamination to exist within exposed soils along SR-133 due to aerially deposited lead (ADL) is likely.

Lead Chromate

Yellow traffic striping and pavement-marking materials (paint, thermoplastic, permanent tape, and temporary tape) on SR-133 potentially contain hazardous levels of lead chromate. Traffic striping would potentially be removed as needed and disposed of during construction.

Lead-Based Paint

The project is mainly located within a rural area. Three vacant parcels are proposed to be acquired for the project. No structures or buildings will be acquired for the project; therefore, lead-based paint will not pose a concern to the proposed project.

Asbestos-Containing Materials

The use of asbestos in many building products was banned by the United States Environmental Protection Agency (EPA) by the late 1970s. Asbestos-containing materials (ACMs) represent a concern when they are subject to damage that results in the release of fibers. ACMs may be found in building materials such as rails, bearing pads, support piers, and expansion joint material in bridges, asphalt, and concrete. Depending on the final location of the Utility Company Assess Point locations and drainage improvements, there may be potential relocation of the 36-inch water line in certain locations. Therefore, there may be ACMs on the pipes or wrappings of the water line.

Soil and/or Groundwater Contamination

No soil and/or groundwater contamination has been identified at parcels proposed for acquisition or properties located in the vicinity of the maximum disturbance limits of the project.

Gas and Oil, and Groundwater Monitoring Wells

No evidence of oil or gas production wells was observed within or near the existing SR-133 right-of-way or the parcels to be acquired.

2.10.3 Environmental Consequences

2.10.3.1 Temporary Impacts

Alternative 1 (Build Alternative)

The Build Alternative would include drainage improvements, shoulder widening (to include bicycle lanes), utility undergrounding, and the safety improvement (which was approved as part of the 2017 State Route 133 Safety Project Mitigated Negative Declaration/Categorical Exclusion). Potential hazardous materials impacts for the proposed project are described in detail below and include aerially deposited lead (ADL), lead chromate, ACM, and unknown contaminants.

Aerially-Deposited Lead

There are standard procedures to be followed with respect to the potential to encounter hazardous materials during construction. The project would be required to undergo sampling to confirm project consistency with the new Department of Toxic Substances Control (DTSC) Lead Agreement. ADL from the historical use of leaded gasoline exists along roadways throughout California. There is the likely presence of soils with elevated concentrations of lead as a result of ADL on the State Highway System right-of-way within the limits of the Build Alternative. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016, ADL Agreement between the California Department of Transportation (Caltrans) and the DTSC. This ADL Agreement allows such soils to be safely reused within the project limits as long as all requirements of the ADL Agreement are met.

The following Project Feature HAZ-1 would minimize this effect:

PF-HAZ-1 During the Plans, Specifications, and Estimates (PS&E), soil sampling will be conducted for aerially deposited lead (ADL) in unpaved locations immediately adjacent to State Route 133 (SR-133) for ADL-related impacts. The ADL investigation will be conducted by the California Department of Transportation (Caltrans) Environmental Engineering Branch (EE) during the early stage of design. The Caltrans Design Branch should provide EE with the layout plans showing the locations of soils

subject to disturbance at the early stage of design. If lead contamination is found, the results will be included in the PS&E document.

Lead Chromate

Yellow traffic striping and pavement-marking materials (paint, thermoplastic, permanent tape, and temporary tape) that would be removed during construction of the Build Alternative may contain an elevated concentration of metals such as lead. Removal of these materials during construction could affect construction workers and the surrounding environment. However, Project Feature HAZ-2 would minimize this effect.

PF-HAZ-2 During the design phase, the yellow traffic striping and pavement marking materials will be tested for lead and lead chromate. If hazardous materials are discovered, the Construction Contractor will remove and properly dispose of any materials in accordance with the Caltrans' *Construction Manual* (July 2017), Chapter 7, Section 7-107, Hazardous Waste and Contamination.

Asbestos-Containing Material

Potential ACMs in existing pipelines may be disturbed by the proposed drainage improvements. Removal or disturbance of ACMs could affect construction workers and the surrounding environment. ACMs would be removed and disposed of by a certified asbestos abatement specialist in compliance with State regulations and Caltrans Standard Specifications. Project Features HAZ-3 and HAZ-4 specifically require proper testing, monitoring, removal, and disposal of ACMs.

PF-HAZ-3 During the Project Approval and Environmental Document (PA&ED) phase, ACM investigation will be conducted by trained and/or licensed professionals and will comply with the United States Environmental Protection Agency (EPA), National Emission Standards for Hazardous Air Pollutants (NESHAPs), Code of Federal Regulations (CFR) Title 40, Southern California Air Quality Management District (SCAQMD) Rule 1403, and Department of Housing and Urban Development (HUD) and California Department of Public

Health (CDPH) guidelines. Potential locations for this investigation include the alignment of the existing 36-inch water line located along the southbound shoulder of SR-133. The results of the investigation will provide a description of the ACM locations, estimated quantity, and recommendations for removal, containment, and off-site transportation and disposal.

Unknown Contaminants

The potential for hazardous waste to be encountered during construction with respect to the petroleum pipeline or historical use would be addressed through compliance with the Unknown Hazards Procedures in Caltrans' *Construction Manual* (July 2017); see Project Feature HAZ-4 below.

PF-HAZ-4 During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 in the Caltrans' *Construction Manual* (July 2017).

With implementation of the project features discussed above, all potential impacts related to hazardous materials are expected to be addressed.

Alternative 2 (No Build Alternative)

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

2.10.3.2 Permanent Impacts

Alternative 1 (Build Alternative)

Routine maintenance activities during operation of the Build Alternative would be required to follow applicable regulations with respect to the use, storage, handling, transport, and disposal of potentially hazardous materials. Therefore, the operation of the Build Alternative would not result in adverse impacts related to hazardous waste or materials.

Alternative 2 (No Build Alternative)

The No Build Alternative would not change the existing physical environment and, therefore, there would be no permanent impacts related to hazardous waste under this alternative. Similar to the Build Alternatives, routine maintenance activities would continue under the No Build Alternative, including compliance with applicable regulations regarding the handling and disposal of potentially hazardous materials.

2.10.4 Avoidance, Minimization, and/or Mitigation Measures

Because the project will incorporate Project Features PF-HAZ-1 through PF-HAZ-4 outlined above, no adverse impacts related to hazardous waste would occur. Therefore, no avoidance, minimization, and/or mitigation measures are required.

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