3.9 HAZARDOUS MATERIALS AND WASTES

The section identifies known hazardous material sites within the study area and analyzes any hazard-related impacts that could occur as a result of the alternatives.

3.9.1 REGULATORY REQUIREMENTS

The regulatory requirements discussion outlines the federal and state policies that are relevant to hazardous materials.

Federal

Resource Conservation and Recovery Act (RCRA)

RCRA governs the disposal of solid and hazardous waste. Congress passed RCRA in 1976 as an amendment to the Solid Waste Disposal Act of 1965. RCRA was intended to address the growing volume of municipal and industrial waste and set national goals for protecting human health and the environment from the potential hazards of waste disposal. RCRA sets forth measures to conserve energy and natural resources. RCRA Subtitle C establishes a hazardous waste program intended to regulate such wastes from their creation to their disposal – a framework sometimes called "cradle to grave." RCRA Subtitle I sets forth an underground storage tank (UST) program to regulate such storage of hazardous substances, including petroleum products. The Environmental Protection Agency (EPA) has primary responsibility for implementing RCRA, but some states, including California and Nevada, have received authorization to implement RCRA and issue permits.

Comprehensive Environmental Response and Liability Act (CERCLA)

CERCLA, also known as Superfund, was enacted in December 1980 and amended in 1986. CERCLA provides a basis for taxing chemical and petroleum manufacturers and provides federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA sets forth requirements concerning closed and/or abandoned hazardous waste sites, determines liability of the persons responsible for releases of hazardous waste at these sites, and administers a trust fund using collected taxes to provide for cleanup when no responsible party can be identified.

Occupational Safety and Health Standards

Title 29 under the Code of Federal Regulations focuses on worker health and safety as it relates to worker exposure to hazards. The Occupational, Safety, and Health Administration (OSHA), born out of the Occupational Safety and Health Act of 1970, is the primary agency responsible for setting and enforcing standards to assure safe and healthful working conditions for working men and women and provide training, outreach, education, and assistance.

State

California Health and Safety Code

Hazardous waste management in California is regulated under the authority of the California Health and Safety Code. The Health and Safety Code ensures employment of proper technology and management practices, safe handling, treatment, recycling, and destruction of hazardous waste. The California Department of Toxic Substances Control (DTSC) carries out many related programs and measures to protect the public health and environment from potential threats of hazardous substances and wastes.

The California State Fire Marshal (CSFM) participates in the Certified Unified Program Agency (CUPA), which consolidates and coordinates activities and programs related to hazardous wastes generators and treatments, storage tanks, hazardous material releases, and hazardous material management plans required by chapter 6.11 of the California Health and Safety Code. The CSFM provides regulatory oversight, CUPA certifications, evaluations of the approved CUPAs, and training and education.[1]

According to Title 22 §66261.20 of the California Code of Regulations (CCR), waste is considered hazardous if it includes one of the following four characteristics; 1) ignitability, 2) corrosivity, 3) reactivity, and 4) toxicity. CCR Title 22, Division 4.5 contains environmental health standards for the management of hazardous waste. Title 22 requires hazardous waste is managed according to applicable regulations with regard to handling, transport, exposure requirements, and disposal requirements under a uniform hazardous waste manifest, with the specific procedures identified in Title 8 of the California Code of Regulations.

[1] California Office of the State Fire Marshal, 2013

3.9.2 METHODS OF EVALUATION

Construction of one or more of the elements of the Build Alternative would have varying potential to result in environmental effects related to hazardous materials and wastes. The study area for hazardous materials and waste is defined as the existing railroad right-of-way, the temporary and permanent footprints for each of the proposed physical improvements. Temporary impact areas are locations that would be needed during construction but would be restored to their original conditions post construction (i.e. staging areas, ingress/egress). Permanent impact areas include all proposed improvements and associated facilities and affected resources that would not be restored back to their original conditions (i.e. new track locations, stations, etc.).

Analysis for this program-level document consisted of consulting various databases to identify potentially hazardous sites that overlap with the temporary and permanent impact footprints of all potential improvements. The hazardous materials analysis included a qualitative comparison of potential impacts on humans and the natural environment based on possible exposure to hazardous materials near the study area during construction and/or operation of proposed improvements.

The following databases were consulted:

- **Envirofact Database** – U.S. Environmental Protection Agency: this database searches toxic chemical releases, water discharge permit compliance, hazardous waste handling processes, Superfund status, and air emission estimates for particular geographic locations.[2]
- **Envirostor Cleanup/Hazardous Waste Databases** – California Department of Toxic Substances Control: EnviroStor's site database contains both a list of contaminated sites as well as lists of facilities that process or transfer toxic waste. Information also contains permit type, cleanup status, and location.
- **Solid Waste Information System (SWIS) Database** - California Department of Resources Recycling and Recovery: The SWIS database contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.[3]

[2] US EPA, 2014a

[3] CalRecycle, 2013,

- **Underground Storage Tanks (UST)** - State Water Resources Control Board: An underground storage tank (UST) is defined by law as "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground."[4]

3.9.3 AFFECTED ENVIRONMENT

Hazardous materials can pose a potential threat to human health or the environment if improperly stored, transferred, or disposed. Remediation of any hazardous material sites located within the study area can dramatically increase the capital cost of a project, thus understanding potentially hazardous sites early in the design process can influence future planning efforts.

Hazardous materials can be released through airborne fumes, vapors, or dust. Negative implications of hazardous materials include risks to soil or groundwater quality. In general, concentrations of hazardous materials that are higher than regulatory standards necessitate specific requirements for handling, primarily during excavation and other earth moving activities.

This program-level document identifies potentially hazardous sites that are known near the existing Coast Corridor alignment and in proposed improvement areas. According to the Monterey County General Plan EIR, agricultural producers are common users of hazardous materials in the county along with commercial, industrial, and institutional industries.[5] According to the San Luis Obispo County General Plan Safety Element, many hazardous materials are shipped through the county on US 101, the Union Pacific Railroad, and other state highways; therefore, past vehicle spills or accidental releases of unknown contaminants are possible risks.[6] Additionally, mobile sources, including trucks, trains, and farm equipment are significant sources of diesel emissions. As a result, exhaust from engines on major transportation corridors includes high concentrations of particulate matter that is deposited nearby.[7] According to Caltrans, aerially deposited lead is often deposited along and near highways from past leaded fuel vehicle emissions.[8]

[4] California EPA, 2013

[5] County of Monterey, 2006, p. 4.13-1

[6] County of San Luis Obispo, 1999a, p. 24

[7] County of Monterey, 2006, p. 4.1-6

[8] Caltrans, 2014

Furthermore, industrial, agricultural, and commercial establishments also release hazardous materials into the environment, especially where pesticides are commonly used.[9]

Several historic hazardous sites and hazardous sites were identified within the study area. Historic sites generally refer to a hazardous site that has had past enforcement actions to remediate the area. Three historic-status sites were identified near the proposed Soledad Station. Hazardous sites were also identified near the proposed King City siding, and in several portions of the existing alignment. One hazardous historic site was identified within section #1 of the existing alignment and another within section #8. These sites have had enforcement actions in place to remediate or contain identified contamination. The study area does not contain any Superfund sites or landfills.

3.9.4 ENVIRONMENTAL CONSEQUENCES

No Build Alternative

The No Build Alternative represents the continuation of existing rail operations and physical components, and assumes the perpetuation of existing freight and passenger service between without any physical improvements south of Salinas and San Luis Obispo. The only physical improvement expected under the No Build Alternative would be the installation of positive train control (PTC) along the Corridor, which would provide increased safety for freight and passenger trains. PTC equipment would likely be installed within the existing railroad right-of-way or would modify existing signaling equipment, and train operations would continue as it currently does.

Both Monterey and San Luis Obispo Counties have identified all major transportation corridors (including railroads) as containing deposited particulate matter and lead. Therefore, it is reasonable to assume that areas immediately surrounding the railroad right-of-way could contain concentrations of aerially deposited lead from former lead-based fuels, as well as pesticides and herbicides to control growth near railway and roadway infrastructure. As a result, hazardous materials are likely to be present under the No Build Alternative. Installation of PTC would require excavation in the railway right-of-way and may result in hazardous materials related effects. Separate environmental review of these projects as they

[9] County of San Luis Obispo, 1999b, pp. 101-107

are implemented would establish as appropriate any additional mitigation necessary beyond adherence to all applicable federal and state regulations regarding the handling and disposal of hazardous materials.

Build Alternative

Corridor-Wide Hazardous Materials and Wastes

Overall, there is potential risk to uncover hazardous materials near roadways and agricultural areas within the entire Coast Corridor study area, owing to aerially deposited lead and particulate matter deposited from vehicles as well as pesticide use. Most of the study area roughly traces US 101 and/or borders agricultural land-use types; therefore, it is reasonable to assume that there would be a potential high risk associated with proposed improvements across the corridor.

Generally, all of the Build Alternative's proposed improvements would result in varying levels of ground disturbance during construction through excavation and other construction activities. As a result, construction activities may likely encounter contaminated soil containing pesticide or herbicide residue, aerially deposited lead, or other soil or groundwater contaminants. If proposed improvements require the demolition of existing facilities or structures, construction activities may likely encounter asbestos or lead-based paint materials. In turn, construction activities associated with the Build Alternative could potentially expose construction workers and surrounding residents to hazardous materials if the materials are not properly managed and remediated.

Subsequent environmental analysis would determine the level of risk and appropriate management and remediation efforts associated with each Build Alternative improvement.

Site-Specific Hazardous Materials and Wastes

Table 3.9-1 below summarizes the findings from records and database searches of both active- and closed-status hazardous sites along the study area. Active-status refers to recorded hazardous sites that are currently open and awaiting remediation or enforcement efforts. Closed-status refers to recorded hazardous sites that have already undergone remediation or enforcement efforts, thus are considered "historic."

Potential hazardous risk ratings were not assigned to active sites within the study area. Database searches for this program-level document provide a broad-level understanding of hazardous sites near proposed upgrade areas for planning

purposes, but does not provide adequate detail to determine the severity of each site in relation to the proposed work involved or the cleanup schedule. Therefore, potential cleanup intensity could vary from site to site.

The database searches found several hazardous sites within the permanent and temporary impact areas of the proposed improvements; however, no superfund sites or solid waste landfills were identified in the study area.

Existing Alignment Upgrades

A hazardous site on the criteria and hazardous air pollutant inventory is located within existing alignment section #1. Proposed upgrades in this area include replacement of rail ties, tracks, and potentially also ballasts. These components and areas may be covered in pesticide/herbicide residues (a potential corridor-wide hazard) and as such may be considered hazardous waste requiring special handling and disposal.

Passenger Stations

Three historic hazardous sites were identified near the proposed Soledad Station. These sites were classified as leaking underground storage tanks, but are no longer active because of past remediation efforts.

Siding Extensions

The database searches identified three hazardous sites within the temporary impact areas associated with the proposed King City siding extension. Two sites are facilities under the Spill Prevention, Control, and Countermeasure (SPCC) rule, which includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines.[10] Another site is a cleanup program site that is still active in status. Given that the hazardous site is located within a temporary impact area, impacts would only occur over the duration of construction activities. Furthermore, there is the potential for the siding extension to be designed to avoid these areas, but if such areas are included, further mitigation may be required to minimize hazards to workers and people in the area.

Curve Realignments, New Powered Switches, and New Sidings

No hazardous sites were identified near any of the proposed curve realignments, new powered switches, or new sidings. However, construction of selected elements of the Build Alternative may require the removal of buildings, structures, soils, and/or paving materials to accommodate new construction. In particular, one

[10] US EPA, 2014b

portion of the Henry/Santa Margarita curve realignment could require acquisition of agricultural and residential properties and demolition of existing buildings on site. Demolition activities may encounter lead-based paint and asbestos-containing building materials. These materials would have to be removed prior to demolition and transported to a certified disposal facility. Construction activities may also encounter contaminated soils and/or groundwater, aerially-deposited lead or particulate matter, or other previously identified hazardous materials that must be removed, disposed of, and remediated.

Table 3.9-1 Hazardous Sites and Materials in the Coast Corridor

Build Alternative Components	Recorded "Active-Status" Hazardous Sites	Recorded "Closed-Status" Hazardous Sites	Likelihood of Encountering Corridor-Wide Hazardous Materials
Salinas Powered Switch	0	0	Moderate
Upgrades to Existing Alignment Section #1	1	0	Moderate
Spence Siding Extension	0	0	Moderate
Upgrades to Existing Alignment Section #2	0	0	Moderate
Gonzales Powered Switch	0	0	Moderate
Soledad Powered Switch	0	0	Moderate
Soledad New Passenger Station	0	3	Moderate
Harlem/Metz Curve Realignments	0	0	Moderate
Chalone Creek New Siding	0	0	Moderate
Upgrades to Existing Alignment Section #3	0	0	Moderate
Coburn Curve Realignments	0	0	Moderate
King City Siding Extension	3	0	Moderate

Build Alternative Components	Recorded "Active-Status" Hazardous Sites	Recorded "Closed-Status" Hazardous Sites	Likelihood of Encountering Corridor-Wide Hazardous Materials
King City New Passenger Station	0	0	Moderate
King City Powered Switch	0	0	Moderate
Upgrades to Existing Alignment Section #4	0	0	Moderate
MP 165 Curve Realignment	0	0	Moderate
San Lucas New Siding	0	0	Moderate
Upgrades to Existing Alignment Section #5	0	0	Moderate
MP 172 Track Realignment	0	0	Moderate
San Ardo Powered Switch	0	0	Moderate
Getty/Bradley Curve Realignments	0	0	Moderate
Bradley Siding Extension	0	0	Moderate
Bradley Powered Switch	0	0	Moderate
Upgrades to Existing Alignment Section #6	0	0	Moderate
Upgrades to Existing Alignment Section #7	0	0	Moderate
McKay/ Wellsona Curve Realignments	0	0	Moderate
McKay East Powered Switches	0	0	Moderate
Wellsona New Siding	0	0	Moderate
Upgrades to Existing Alignment Section #8	0	1	Moderate

Build Alternative Components	Recorded "Active-Status" Hazardous Sites	Recorded "Closed-Status" Hazardous Sites	Likelihood of Encountering Corridor-Wide Hazardous Materials
Wellsona/Paso Robles Curve Realignments	0	0	Moderate
Templeton Siding	0	0	Moderate
Templeton/Henry Curve Realignments	0	0	Moderate
Upgrades to Existing Alignment Section #9	0	0	Moderate
Henry/Santa Margarita Curve Realignment	0	0	Moderate
Santa Margarita Powered Switch	0	0	Moderate
Cuesta Second Main Track	0	0	Moderate
Upgrades to Existing Alignment Section #10	0	0	Moderate

The risk of encountering corridor-wide hazardous materials and wastes (including aerially-deposited lead and pesticide/herbicide residues) are not identified on a site-specific basis, as they do not derive from a single point source in a particular location.

3.9.5 AVOIDANCE, MINIMIZATION, AND MITIGATION STRATEGIES

The Build Alternative will be designed to minimize impacts related to hazardous materials and wastes along the Corridor. The following strategies have been identified at this preliminary stage to avoid, minimize, and/or mitigate any potentially significant impacts.

MIN-HAZ-1. As one or more components of the Build Alternative are selected for further design and potential development, detailed investigation of soils for contamination as part of an environmental site assessment (ESA), and if appropriate a Phase II ESA, for each component prior to implementation should be conducted. Where conditions warrant a Phase II ESA, such ESAs shall include the following:

- A work plan that includes the numbers and locations of proposed soil borings/monitoring wells, sampling intervals, drilling and sampling methods, analytical methods, sampling rationale, site geohydrology, field screening methods, quality control/quality assurance, and reporting methods.
- A site-specific Health and Safety Plan (HSP) signed by a Certified Industrial Hygienist.
- Necessary permits for encroachment, boring completion, and well installation.
- A traffic safety plan.
- Sampling program (fieldwork) in accordance with the work plan and HSP. Fieldwork shall be completed under the supervision of a geologist registered in the State of California, as appropriate.
- Hazardous materials testing through a certified laboratory.
- Documentation to include field procedures, boring logs/well diagrams, tables of analytical results, cross-sections, an evaluation of the levels and extent of contaminants found, and conclusions and recommendation regarding the environmental condition of the site and the need for further assessment. Recommendations may include additional assessment or handling of the contaminants found though the contaminated soil contingency plan. If the contaminated soil contingency plan is inadequate for the contamination found, a remedial action plan shall be developed. Contaminated groundwater shall generally be handled though the NPDES/dewatering process**.**
- Disposal process including transport by a state-certified hazardous material hauler to a state-certified disposal /recycling facility licensed to accept/treat the identified waste.

Where contaminated groundwater is encountered, the project sponsor shall obtain a NPDES permit prior to the issuance of a permit to construct. The NPDES permit shall specify site-specific testing and monitoring requirements and discharge limitations.

Additionally, available agency files for moderate and high risk properties should be reviewed prior to demolition, grading, or construction. If the file review indicates a low likelihood of contaminants being present beneath or adjacent to a project feature (rail alignment, station, etc.), additional assessment/mitigation may not be recommended and the property could be reclassified as low risk.

MIN-HAZ-2. Surveys for lead-based paint and asbestos containing materials would be required prior to demolition of any buildings or structures.

MIN-HAZ-3. A Site Management Program/Contingency Plan would be required prior to construction to address known or potential hazardous material issues such as contaminated soil or groundwater, health and safety plan for construction workers and the public, and procedures to protect workers and the public if buried contaminants are encountered.

MIN-HAZ-4. Construction contractors shall dispose of all hazardous or solid wastes and debris encountered or generated during construction and demolition activities in accordance with all applicable Federal regulations.

MM-HAZ-5. A Hazardous Materials Management Plan for all facilities that use, store, or dispose of hazardous materials should be prepared. Facilities emitting toxic air emissions shall submit inventories and plans to the appropriate air quality management district and be subject to permitting and monitoring regulations of the district. All necessary local, state and federal permits for the installation and operation of any above or below ground chemical or fuel storage tanks prior to installing such tanks would be obtained.

3.9.6 SUBSEQUENT ANALYSIS

Prior to implementing specific elements of the Build Alternative, component-specific hazardous materials evaluations should be conducted. These evaluations would be used to determine if additional mitigations strategies from those discussed above in **Subsection 3.9.5** would be applicable.