3.10 Hazards and Hazardous Materials

3.10.1 Introduction

This section describes the regulatory setting and affected environment for hazards and hazardous materials. This section addresses hazards and hazardous materials sites that are known to occur or have the potential to occur in the proposed hazards and hazardous materials RSA and describes the potential impacts on those resources during construction and operation of the proposed Project. This section also identifies the potential for cumulative impacts of the proposed Project on hazards and hazardous materials when considered in combination with other relevant projects.

3.10.2 Regulatory Setting

This section identifies the federal, state, regional, and local laws, regulations, and orders that are relevant to the analysis of hazards and hazardous materials. This section also addresses the proposed Project's consistency with the regulations described herein.

3.10.2.1 Federal

Clean Air Act (42 United States Code (U.S.C.) 7401 et seq.)

The Clean Air Act is intended to protect the public from hazardous airborne contaminants that can affect human health. The National Emissions Standards for hazardous air pollutants were established under the United States Environmental Protection Agency Clean Air Act. These emissions standards include the regulation of asbestos.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA or Superfund)

CERCLA, commonly known as Superfund, provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified.

Hazardous Materials Transport

The U.S. Department of Transportation, along with the California Highway Patrol (CHP) and Caltrans, regulates transportation of hazardous materials between states and within California. Together, these agencies determine container types used and license hazardous-waste haulers for transportation of hazardous waste on public roads. The FRA enforces the Hazardous Materials Regulations, which include requirements that railroads and other transporters of hazardous materials, as well as shippers, have and adhere to security plans and also train their employees involved in offering, accepting, or transporting hazardous materials on both safety and security matters.

National Oil and Hazardous Substances Pollution Contingency Plan

The National Oil and Hazardous Substances Pollution Contingency Plan is the federal plan for responding to oil spills and hazardous substances releases. The plan establishes the National Response Team and its roles in the National Response System, which include planning and coordinating response to major discharges of oil or hazardous waste, providing guidance to Regional Response Teams, coordinating a national program of preparedness planning and response, and facilitating research to improve response activities.

Oil Pollution and Prevention Regulation (40 Code of CFR Part 112)

The EPA's oil spill prevention program includes the SPCC and the Facility Response Plan rules. The SPCC rule helps facilities prevent a discharge of oil into navigable waters or adjoining shorelines. The Facility Response Plan rule requires certain facilities to submit a response plan and prepare to respond to a worst-case oil discharge.

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act, which is implemented by the Occupational Safety and Health Administration (OSHA), contains requirements, as set forth in Title 29 of the CFR Section 1910, that are designed to promote worker safety, worker training, and a worker's right-to-know. Title 49 of the CFR requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements.

Resource Conservation and Recovery Act (RCRA)

Under RCRA, the EPA has the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste by large-quantity generators (2,205 pounds/month or more). Under RCRA regulations, hazardous materials and wastes must be tracked from the time of generation to the point of disposal. Additionally, all hazardous waste transporters are required to be permitted and must have an identification number. In California, the EPA has delegated RCRA enforcement to the California Environmental Protection Agency (Cal/EPA) DTSC.

Right-to-Know Laws and Pollution Prevention Requirements

EO 12856 was issued on August 3, 1993, directing federal agencies to conduct their facility management and acquisition activities to minimize the quantity of toxic chemicals entering any waste stream, including releases to the environment; report to the public on toxic chemicals entering any waste stream from their facilities, including releases to the environment; improve local emergency planning, response, and accident notification; and encourage markets for clean technologies and safe alternatives to extremely hazardous substances or toxic chemicals.

Superfund Amendments and Reauthorization Act

CERCLA enlarged and reauthorized the Superfund Amendments and Reauthorization Act of 1986 (SARA, Public Law (PL) 99-499). The EPA compiles a list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the U.S. and its territories, known as the National Priorities List (NPL).

Toxic Substances Control Act (TSCA)

The TSCA of 1976 provides EPA with authority to require reporting, record-keeping, and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, import, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and LBP. The Frank R. Lautenberg Chemical Safety for the 21st Century Act was implemented on June 22, 2016, as an update to the TSCA. The new law includes mandatory requirements for the EPA to evaluate existing chemicals with clear and enforceable deadlines; risk-based chemical assessments; increased public transparency for chemical information; and a consistent source of funding for EPA to carry out the responsibilities under the new law.

3.10.2.2 State

California Environmental Protection Agency

Cal/EPA and the State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

- Aboveground Petroleum Storage Tank Act.
- ACM Regulations.
- California Accidental Release Prevention Program.
- Emergency Response to Hazardous Materials Incidents.
- Hazardous Substances Information and Training Act.
- Hazardous Waste Control Law.
- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs (i.e., Tiered Permitting).
- Public Safety/Fire Regulations/Building Codes.
- Safe Drinking Water and Toxic Enforcement Act.
- Federal Toxic Substances Control Act of 1976.
- Underground Storage of Hazardous Substances Act.

Within Cal/EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law.

Hazardous Materials Release Response Plans and Inventory Act (Business Plan Act)

The Business Plan Act requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. A business plan includes an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training

in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Per the requirements of this act, the preparation of a Hazardous Materials Business Plan (HMBP) would be required for the safe storage, containment, and disposal of chemicals and hazardous materials related to the proposed project operations, including waste materials. As of May 11, 2016, all sections within CCR Title 19, Division 2, Chapter 4 have been renumbered to include Article 3.9, which includes procedures for regional railroad accident preparedness and immediate response.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program)

The Unified Program required the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a Certified Unified Program Agency. The Program Elements consolidated under the Unified Programs are: Tiered Permitting, Aboveground Petroleum Storage Tank SPCC, Community-Right-To-Know, California Accidental Release Prevention, Underground Storage Tanks (USTs), and Uniform Fire Code Plans and Inventory Requirements.

3.10.2.3 Regional

Certified Unified Program Agency

Passage of SB 1082 in 1993 required consolidation of the six state-mandated hazardous waste and hazardous materials management programs within a single Unified Program, to be administered by a locally Certified Unified Program Agency). These programs include the following:

- Hazardous Materials Business Plan Program.
- Hazardous Waste Generator Program.
- Underground Storage Tank Program.
- California Accidental Release Prevention Program (CalARP).
- Tiered Permitting Program.
- Aboveground Petroleum Storage Act.

Alameda County Department of Environmental Health (ACDEH) is the Certified Unified Program Agency that coordinates and enforces numerous local, state, and federal hazardous materials management and environmental protection programs in Alameda County.

Alameda County General Plan Safety Element

The Safety Element of the Alameda County General Plan includes policies and programs to reduce risks associated with the creation, storage, transport, and disposal of hazardous wastes (Alameda County 2014). It provides information about the public airports operating within the County and development standards for airports or activities occurring within the vicinity of an airport. The goals and policies below are relevant to the proposed Project.

Goal 4: Minimize residents' exposure to the harmful effects of hazardous materials and waste.

- Policy P1: Uses involving the manufacture, use or storage of highly flammable (or toxic) materials and highly water reactive materials should be located at an adequate distance from other uses and should be regulated to minimize the risk of on-site and off-site personal injury and property damage. The transport of highly flammable materials by rail, truck, or pipeline should be regulated and monitored to minimize risk to adjoining uses.
- Policy P3: The County shall minimize risks of exposure to or contamination by hazardous materials by educating the public, establishing performance standards for uses that involve hazardous materials, and evaluating soil and groundwater contamination as part of development project review.
- **Policy P6:** Adequate separation shall be provided between areas where hazardous materials are present and sensitive uses such as schools, residences and public facilities.
- O Policy P8: Developers shall be required to conduct the necessary level of environmental investigation to ensure that soil, groundwater, and buildings affected by hazardous material releases from prior land uses and lead or asbestos in building materials will not have a negative impact on the natural environment or health and safety of future property owners or users. This shall occur as a pre-condition for receiving building permits or planning approvals for development on historically commercial or industrial parcels.
- **Goal 5:** Minimize potential impacts from aircraft accidents at facilities that contain hazardous materials and waste.
 - Policy P1: Require proposed land use projects within Airport Influence Areas (AIAs) that utilize hazardous materials (flammable, explosive, corrosive, or toxic) to be referred to the Airport Land Use Commission (ALUC) for a compatibility determination.
- **Goal 6:** Prepare and keep current emergency procedures in the event of potential natural or man-made disaster.
 - o **Policy P2:** Adequate emergency water flow, emergency vehicle access, and evacuation routes shall be incorporated into any new development prior to project approval.

Alameda County Emergency Operations Plan

The Alameda County Emergency Operations Plan (EOP) (Alameda County 2012) provides an overview of the jurisdiction's approach to emergency operations. It identifies emergency response policies, describes the response and recovery organization, and assigns specific roles and responsibilities to County departments, agencies, and community partners. The EOP has the flexibility to be used for all emergencies and will facilitate response and recovery activities in an efficient and effective way.

3.10.2.4 Local Plans

City of Fremont General Plan

The Safety Element of the City of Fremont General Plan is intended to guide decision making that helps reduce the risks associated with environmental hazards, including hazardous materials and wastes, community emergency preparedness and fire hazards (City of Fremont 2011). The goals and policies below are relevant to the proposed Project.

• **Goal 10-4: Fire Hazards**: Minimum risk to life and property resulting from fire hazards.

- Policy 10.4-2: Development Standards: Maintain development standards that limit
 potential health and safety risks, and the risks of structure damage and severe economic loss
 due to fire hazards.
- Policy 10-4.3: Access and Clearance: Require adequate access and clearance for fire equipment, fire suppression personnel, and evacuation for new development.
- Goal 10-6: Hazardous Materials and Waste: Minimum feasible risks to life, property and the
 environment resulting from the use, storage, transportation and disposal of hazardous
 materials.
 - Policy 10-6.1: Hazardous Material Regulation: Maintain sufficient regulation of land use and construction to minimize potential health and safety risks associated with future, current or past use of hazardous materials in Fremont.
 - Policy 10.6-3: Remediation: Encourage site investigation and cleanup on properties where contamination is likely.
 - o **Policy 10-6.4: Hazardous Waste Management Plan:** Comply with State law requiring adoption of a Hazardous Waste Management Plan.
 - **Policy 10-6.5: Hazardous Material Oversight:** Maintain sufficient oversight regarding the storage, transport and handling of hazardous materials within the City.
 - Policy 10-6.6: Hazardous Material Disclosure: Proper disclosure and management by employers that use hazardous materials to disclose risks to employees and nearby residents.
 - Policy 10.6-7: Emergency Action Plan: Maintain City Emergency Action Plans and sufficient response capability to respond to a hazardous material emergency.

City of Fremont Emergency Operations Plan, Basic Plan

The City of Fremont Emergency Operations Plan, Basic Plan was adopted in 2020. The purpose of the plan is to establish the composition and organization of the City's emergency management structure, determine individual roles and responsibilities, and detail the concept of operations. The plan also delineates strategic, operational and tactical initiatives employed by the City of Fremont in response to an Emergency (City of Fremont 2020).

Hayward 2040 General Plan

The Hazards Element of the Hayward 2040 General Plan addresses risks associated with the use, transport and disposal of hazardous materials and wastes in Hayward (City of Hayward 2022). The Hazards element also addresses Airport hazards. The goals and policies below are relevant to the proposed Project.

- Goal HAZ-6: Protect people and environmental resources from contaminated hazardous
 material sites and minimize risks associated with the use, storage, transport, and disposal of
 hazardous materials.
 - Policy HAZ-6.1: Hazardous Materials Program: The City shall maintain its status as a Certified Unified Program Agency and implement the City's Unified Hazardous Materials and Hazardous Waste Management Program, which includes:

- 1. Hazardous Materials Release Response Plans and Inventories (Hazardous Materials Business Plans HMBP);
- 2. California Accidental Release Prevention (CalARP) Program;
- 3. Underground Storage Tank (UST) Program;
- 4. Above-ground Petroleum Storage Act (APSA) Program, including Spill Prevention, Control, and Countermeasure (SPCC) Plans;
- 5. Hazardous Waste Generator Program;
- 6. On-site Hazardous Waste Treatment (Tiered Permit) Program; and
- 7. California Fire Code Hazardous Material Management Plans (HMMP) and Hazardous Materials Inventory Statements (HMIS).
- Policy HAZ-6.2: Site Investigations: The City shall require site investigations to determine
 the presence of hazardous materials and/or waste contamination before discretionary
 project approvals are issued by the City. The City shall require appropriate measures to be
 taken to protect the health and safety of site users and the greater Hayward community.
- Policy HAZ-6.3: Permit Requirements: The City shall direct the Fire Chief (or their designee) and the Planning Director (or their designee) to evaluate all project applications that involve hazardous materials, electronic waste, medical waste, and other hazardous waste to determine appropriate permit requirements and procedures.
- Policy HAZ-6.4: Land Use Buffers: The City shall review applications for commercial and industrial uses that involve the use, storage, and transport of hazardous materials to determine the need for buffer zones or setbacks to minimize risks to homes, schools, community centers, hospitals, and other sensitive uses.
- Policy HAZ-6.7: Agency Coordination: The City shall coordinate with State, Federal, and local agencies to develop and promote best practices related to the use, storage, transportation, and disposal of hazardous materials.
- Policy HAZ-6.8: Truck Routes: The City shall maintain designated truck routes for the transportation of hazardous materials through the City of Hayward. The City shall discourage truck routes passing through residential neighborhoods to the maximum extent feasible.
- **Goal HAZ-7:** Minimize exposure to safety hazards associated with aircraft using the Hayward Executive Airport.
 - O Policy HAZ-7.1: Land Use Safety Compatibility and Airspace Protection Criteria: The City shall consider all applicable federal statutes (including 49 U.S.C. 47107), federal regulations (including 14 Code of Federal Regulations 77 et seq.), the FAA's [Federal Aviation Administration] Airport Compliance Manual, FAA Advisory Circulars and other forms of written guidance, and State law, with respect to criteria related to land use safety and airspace protection when evaluating development applications within the Airport Influence Area of the Hayward Executive Airport.
 - Policy HAZ 7.2: Airport Land Use Compatibility Plan: The City shall require all development projects within the Airport Influence Area designated in the Airport Land Use Compatibility Plan of the Hayward Executive Airport to comply with all applicable federal

statutes (including 49 U.S.C. 47107), federal regulations (including 14 Code of Federal Regulations 77 et seq.), the FAA's Airport Compliance Manual, FAA Advisory Circulars and other forms of written guidance, and State law, with respect to criteria related to land use safety and airspace protection.

 Policy HAZ-7.3: Commission Review: The City shall ensure that all applicable plans, ordinances, and development applications are reviewed by the Alameda County Airport Land Use Commission if required by State law.

City of Oakland General Plan

The Safety Element of the Oakland General Plan includes a policy framework to guide the public decision-making process for safety hazards including fire and hazardous materials (City of Oakland 2004). In 2012, the City adopted its Local Hazard Mitigation Plan as an appendix of the Safety Element. The goals and policies of the General Plan below are relevant to the proposed Project.

- **Policy HM-1:** Minimize the potential risks to human and environmental health and safety associated with the past and present use, handling, storage and disposal of hazardous materials.
- **Policy HM-2:** Reduce the public's exposure to toxic air contaminants through appropriate land use and transportation strategies.
- **Policy HM-3:** Seek to prevent industrial and transportation accidents involving hazardous materials, and enhance the city's capacity to respond to such incidents.
- **Policy FI-1:** Maintain and enhance the city's capacity for emergency response, fire prevention and fire-fighting.
- **Policy FI-3:** Prioritize the reduction of the wildfire hazard, with an emphasis on prevention.

City of Oakland Emergency Operations Plan Update

The EOP was updated in 2021. This plan details who is responsible for carrying out specific actions, establishes lines of authority and organizational relationships, and outlines how actions will be coordinated. The EOP provides guidance for all types of hazards that may impact the City throughout the year. The EOP guides personnel in performance of their duties before, during, and through initial emergency recovery (City of Oakland 2021).

Newark General Plan

The Environmental Hazards Element of the Newark General Plan addresses potential risks to life and property resulting from man-made hazards such as noise and soil contamination (City of Newark 2013). The element also addresses fire hazards and emergency response. The goals and policies of the General Plan below are relevant to the proposed Project.

- **Goal EH-1:** Reduce the potential for injury, harm, property damage, and loss of life resulting from environmental hazards.
 - Policy EH-1.1: Development Regulations and Code Requirements: Establish and enforce development regulations and building code requirements to protect residents and workers from flooding, liquefaction, earthquakes, fires, and other hazards.
 - o **Policy EH-1.5: Adequacy of Access**: Require adequate access and clearance for fire equipment, fire suppression personnel, and evacuation for new development.

- **Goal EH-4:** Protect Newark residents and workers from the potential adverse effects of hazardous materials.
 - Policy EH-4.1: Hazardous Materials Risk Reduction: Seek to reduce the risk of hazardous materials accidents, spills and vapor releases, and minimize the effects of such incidents if they occur.
 - Policy EH-4.4: Design and Construction of Hazardous Materials Facilities: Require that
 all facilities in which hazardous materials are used, handled, or stored are designed and
 constructed to minimize the possibility of environmental contamination and off-site
 impacts. The City will work with county, State, and federal agencies to ensure that such
 facilities are regularly inspected and that applicable regulations are enforced.
 - Policy EH-4.6: Hazardous Materials Transport: Seek to reduce the risk of accidents in the transportation of hazardous materials. The City will require compliance with all hazardous waste transport standards established by state and federal agencies.
 - O Policy EH-4.7: Railroad Cargo Safety: Work with the Union Pacific Railroad (UP) and the California Public Utilities Commission (CPUC) to ensure safe conditions for the loading, unloading, and transport of hazardous materials along rail lines through Newark. UP should be encouraged to maintain its tracks and facilities in excellent condition, and minimize occasions where trains block railroad grade crossings.

City of San Leandro General Plan

The Environmental Hazards Element of the City of San Leandro General Plan addresses natural and man-made hazards in the City, including wildfire, hazardous materials, and aviation accidents. It includes a summary of emergency preparedness in San Leandro, with policies that provide the foundation for disaster planning in the City (City of San Leandro 2017). The goals and policies of the General Plan below are relevant to the proposed Project.

- **Goal EH-2:** Minimize urban wildfire hazards, both within the city and throughout the East Bay Hills.
 - o **Policy EH-2.1: Fire Codes:** Adopt and enforce building and fire prevention codes that require property owners to reduce wildfire hazards on their properties.
- **Goal EH-5:** Protect local residents and workers from the risks associated with hazardous materials.
 - Policy EH-5.1: Regulatory Compliance: Work with the appropriate county, regional, state, and federal agencies to develop and implement programs for hazardous waste reduction, hazardous material facility siting, hazardous waste handling and disposal, public education, and regulatory compliance.
 - Policy EH-5.2: Clean-Up of Contaminated Sites: Ensure that the necessary steps are taken
 to clean up residual hazardous wastes on any contaminated sites proposed for
 redevelopment or reuse. Require soil evaluations as needed to ensure that risks are
 assessed and appropriate remediation is provided.
 - Policy EH-5.3: Design of Storage and Handling Areas: Require that all hazardous material storage and handling areas are designed to minimize the possibility of environmental

- contamination and adverse off-site impacts. Enforce and implement relevant state and federal codes regarding spill containment facilities around storage tanks.
- Policy EH-5.4: Separation from Sensitive Uses: Provide adequate and safe separation between areas where hazardous materials are present and sensitive uses such as schools, residences, and public facilities. Zoning and other development regulations should include performance standards to avoid safety hazards and achieve compatibility between uses.
- Policy EH-5.5: Incident Response: Maintain the capacity to respond immediately and effectively to hazardous materials incidents. Provide ongoing training for hazardous materials enforcement and response personnel.
- Policy EH-5.7: Hazardous Building Materials: Ensure the safe and proper handling of hazardous building materials, such as friable asbestos and lead based paint. If such materials are disturbed during building renovation or demolition, they should be handled and disposed of in a manner that protects human health and the environment.
- **Goal EH-9:** Minimize the local impacts and hazards created by air traffic, ground operations, and all other aviation activities, particularly those associated with Oakland International Airport.
 - Policy EH-9.6: Airport Safety Zones: Regulate land uses within designated airport safety zones, height referral areas, and noise compatibility zones to minimize the possibility of future noise conflicts and accident hazards.

2040 Union City General Plan

The Safety Element of the Union City General Plan seeks to minimize natural and man-made hazards such as wildfire and hazardous materials. The Safety element addresses these risks along with disaster preparedness and emergency response (Union City 2019). The goals and policies of the General Plan below are relevant to the proposed Project.

- **Goal S-4:** To provide increased fire safety through the provision of adequate fire protection infrastructure, public education, and outreach programs.
 - Policy S-4.2: Require Sprinkler Systems and Smoke Detectors: The City shall require sprinkler systems and/or smoke detectors according to the adopted City building and fire codes.
 - Policy S-4.4: Require Brush Clearance and Vegetative Management to Reduce Fire Risk: The City shall require weed abatement, brush clearance, and vegetative management for all properties.
 - Policy S-4.5: S-4.5 Maintain Fire Access: The City shall use appropriate means to maintain fire access roads throughout the City on public and private property.
 - Policy S-4.6: Maintenance of Fire Roads: The City shall support efforts by regional agencies, including Alameda County and the East Bay Regional Parks District, to maintain fire roads for emergency vehicle access.
- **Goal S-7:** To protect public health and safety, property, and the environment by promoting the safe management of hazardous substances and controlling the use, storage, handling and disposal of the most toxic and hazardous substances.

- Policy S-7.1: Control Hazardous Materials: The City shall strictly control the use, storage, and handling of toxic, explosive, or other hazardous materials and wastes at facilities within Union City.
- O Policy S-7.2: Limit Locations of Hazardous Materials: The City shall limit locations of hazardous materials storage and use, through the City's development review or building permit review processes, to those areas where potential accidents will not cause undue risk to people and property and where effective emergency response can be provided. Actions, as found appropriate, shall include the prohibition of certain hazardous materials, combinations of materials, or quantities of materials in particular land use areas and/or facilities.
- O Policy S-7.3: Environmental Site Assessment: The City shall require applications subject to Site Development Review or applications for development on sites where there is potential for contamination to exist to include submittal of a Phase 1 Environmental Site Assessment and Phase 2 Environmental Site Assessment (if required). Any recommendations contained in these documents, including the need for remediation activities or additional study, shall be completed consistent with applicable Federal, State, and local regulations.

3.10.2.5 Other Guidance

Airport Land Use Commissions (ALUCs)

ALUCs are established pursuant to the State ALUC law (Public Utilities Code Article 3.5, State Aeronautics Act, Section 21661.5, Section 21670 et seq., and Government Code Section 65302.3 et seq.) to protect the public health, safety, and welfare by promoting the orderly expansion of airports and adoption of land use measures by local public agencies to minimize exposure to excessive noise and safety hazards near airports, heliports and helipads. ALUCs establish policies for land uses around airports, heliports, and helipads, ensuring that those uses are compatible with airport operations. This is accomplished through the development of Airport Land Use Compatibility Plans (ALUCPs), which address these four impact areas: Noise, Safety, Airspace Protection, and Overflight. ALUCs also ensure that county and city plans (general, specific, and other) and proposed land use policy actions are consistent with the ALUCP. This is done on an advisory basis.

Union Pacific Railroad Hazardous Materials Emergency Response Plan

UPRR Hazardous Materials Management developed the Hazardous Materials Emergency Response Plan, a performance-based plan that provides guidance to the individual reporting a release as well as a list of training requirements for those responding to an incident (UPRR 2021).

3.10.2.6 Consistency with Plans, Policies, and Regulations

The Proposed Project would comply with all relevant federal, state, and local policies and regulations related to hazards and hazardous materials. The proposed Project would provide safe transport and management practices of hazardous materials, which includes compliance with regulations such as the federal Hazardous Materials Transportation Act, the State's Title 26 CCR, and the local certified unified management programs. Therefore, the Proposed Project would be consistent with all policies and regulations related to hazards and hazardous materials.

3.10.3 Methods for Evaluating Environmental Impacts

This section defines the RSA for hazards and hazardous materials and describes the methods used to analyze the impacts on hazards and hazardous materials within the RSA.

3.10.3.1 Resource Study Areas

As defined in Section 3.1, Introduction, RSAs are the geographic boundaries within which the environmental investigations specific to each resource topic were conducted.

The RSA for hazards and hazardous materials (hazards RSA) encompasses the areas directly or indirectly affected by construction and operation of the proposed Project and includes the following:

- 1. Schools RSA: Areas within 0.25 mile of the Project footprint to account for potential hazardous materials releases within that distance of an existing school.
- 2. Contamination RSA: A 0.125-mile radius is considered "adjacent" to the proposed Project and is used to determine the potential for contaminated media, such as soil or groundwater, to be disturbed by the Project construction or operations.
- 3. Airport RSA: For compliance with CEQA, the RSA for potential hazards to airports only extends to 2 miles from the Project footprint for the consideration of airports and airport land uses.

It is assumed that the direct impacts would be confined to the Project footprint, while indirect impacts could extend to the limits of the hazards RSA described above.

3.10.3.2 Data Sources

The following data sources were used to gather hazardous materials and waste data:

- Environmental Data Resources Area/Corridor Report (EDR 2021a, 2021b).
- SWRCB GeoTracker (SWRCB 2021).
- DTSC EnviroStor (DTSC 2021).
- Google Earth (2021).
- CALFIRE Alameda County Fire Hazard Severity Zone Map (CALFIRE 2008).
- Alameda County General Plan Safety Element (Alameda County 2014).
- Hazardous Materials Information Reporting System (HMIRS).
- Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal Facility (TSDF).
- Assessment, Cleanup, and Redevelopment Exchange System (ACRES).
- Superfund Enterprise Management System (SEMS).
- SPILLS90.
- LUST list.
- U.S. Department of Transportation (U.S. DOT) Office of Pipeline Safety Incident and Accident data (OPS).

- Solid Waste Information System (SWIS).
- Active Mines & Mineral Plants Database Listing.
- PCB Activity Database System (PADS).
- RCRA Large Quantity Generators (LQGs).
- Voluntary Cleanup Program Properties (VCPs).
- Toxic Substances Control Act (TSCA)
- HAZNET.
- E-Manifest.
- Section 7 Tracking Systems (SSTS).

3.10.3.3 Terminology

For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined by federal regulations as "a substance or material that ... is capable of posing an unreasonable risk to health, safety, and property when transported in commerce" (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

Hazardous material means 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, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Hazardous wastes are defined in California Health and Safety Code Section 25141(b) as wastes that:

... because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness, [or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific criteria listed in the CCR Title 22. Cleanup requirements are determined on a case-by-case basis by the agency with lead jurisdiction over the project. Under CCR Title 22, the term "hazardous substance" refers to both hazardous materials and hazardous wastes, both of which are classified according to four properties: (1) toxicity; (2) ignitability; (3) corrosiveness; and (4) reactivity (CCR Title 22, Chapter 11, Article 3).

Identified sites of concern were categorized using a subjective risk ranking system, classifying the sites with low risk, moderate risk, high risk, critical risk, or indeterminate risk determinations. The following provides general descriptions of each category:

• **Low-risk** sites have few indications of potential for release of hazardous materials. Sites include those that have had a hazardous materials issue in the past, but have been cleaned up with

approval of the state environmental agency or local regulatory agencies. Examples of low-risk sites include undeveloped or agricultural property, residential property, or benign commercial properties such as office buildings, warehouses, distribution facilities, or municipal facilities with no listed violation.

- Moderate-risk sites have some indications of possible hazardous materials issues. A moderate-risk site may appear on a database as having a permit to handle hazardous materials, but has recorded no violations to date. A site could also be interpreted as moderate risk if there is visible surface staining. Examples of moderate-risk sites include auto repair garages, welding shops, or manufacturing facilities.
- **High-risk** sites have a high potential for releasing hazardous materials or have a recorded release issue. Examples of high-risk sites include current service stations, bulk fueling terminals, sites listed in environmental databases as having had a release, or a known release that has not been remediated.
- **Critical-risk** sites are known contaminated sites with a deed restriction (e.g. "Do Not Break Surface").
- **Indeterminate-risk** sites are those which, at the time of report preparation, did not include sufficient information to include a high, moderate, or low ranking. Indeterminate-risk sites often require additional file review to determine the details of any related environmental issues at the site.

3.10.3.4 Methodology

The primary method of analysis was a review of public records regarding sites with a recorded environmental history. The databases included federal state, and local records of sites with a release, or conditions indicating a release. Sites located within ½ mile were included given a subjective "risk ranking" based on 1) distance relative to the corridor, 2) type of listing and related risk of residual contamination, 3) type of likely contaminant and its specific migration potential, 4) age of the release, and 5) case status (closed, open, monitored).CEQA Thresholds

To satisfy CEQA requirements, hazards and hazardous materials impacts were analyzed in accordance with Appendix G of the CEQA Guidelines. According to the CEQA Guidelines, CCR, Title 14, Section 15002(g), "a significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." As stated in CEQA Guidelines Section 15064(b)(1), the significance of an activity may vary with the setting. The impact analysis identifies and analyzes construction (short-term) and operation (long-term) impacts, as well as direct and indirect impacts (see PRC Section 21065). The proposed Project would have significant hazards and hazardous materials impacts under CEQA if it would:

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

3.10.4 Affected Environment

3.10.4.1 Environmental Setting

Regional Setting

Site Vicinity and Characteristics

The hazards RSA is primarily developed urban with varied land uses and development. The Coast Subdivision tracks travel through heavy and light industrial uses, factories and storage areas, commercial uses, low, medium, and high-density residential uses, recreational uses, and areas of designated open space.

Aerially Deposited Lead (ADL) and Lead-Based Paints

For projects involving construction of transportation corridors, contamination resulting from LBP is a frequent hazardous waste issue. Historically, lead was used as a pigment and drying agent in oilbased paint and many structures built prior to the 1980s may still contain undercoats of LBP. Prior to 1997, Caltrans also used lead-based paint for yellow traffic stripes and pavement markings along roadways (Caltrans 2015). The residue that may be produced from the yellow thermoplastic and yellow paint during road improvement activities may contain lead and chromium (San Joaquin Valley Regional Rail Authority [SJVRRA] 2020). According to the FRA, weathering and routine maintenance of paint on buildings may contaminate nearby soils with lead.

Elevated lead concentrations exist in soils along older roadways as a result of ADL from the historical use of leaded gasoline (Caltrans 2021). Leaded gasoline was used as a vehicle fuel in the United States from the 1920s until the late 1980s. Although lead is no longer used in gasoline formulations, lead emissions from automobiles are a recognized source of contamination in soils along roadways. Surface and near-surface soils along heavily used roadways have the potential to contain elevated concentrations of lead (FRA 2008 and Caltrans 2021).

Treated-Wood Waste

Railroad ties along existing corridors are commonly treated with wood preservatives such as arsenic, chromium, copper, pentachlorophenol, or creosote. If treated-wood waste is not properly disposed of, the chemicals it contains can potentially contaminate soil, surface water, and/or groundwater (SJVRRA 2020). There is potential for treated-wood waste to occur in the hazards RSA.

Asbestos-Containing Materials

Exposure to asbestos can result in lung cancer, mesothelioma (i.e., cancer of the linings of the lungs and abdomen), or asbestosis (scarring of lung tissues that results in constricted breathing). ACMs, such as thermal system insulation, surfacing materials, asphalt, and vinyl flooring, may be present in building and bridge structures constructed prior to 1981 (Cal. Code Regs. Title 8, Section 5208).

Naturally occurring asbestos (NOA), which is dependent on a type of geologic formation, can also be a source of ACMs that can become airborne during earthmoving activities. NOA is most commonly found in serpentinite and ultramafic rocks (Van Gosen and Clinkenbeard 2011). USGS map of Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California (2011), does not show any known NOA sites near the Coast subdivision.

Local Setting

Environmental Records Review

An EDR environmental information database search was completed in October 2021. Review of this database search indicated that many listings within the hazards RSA are located outside the UPRR ROW; these include permitted disposal of regulated or hazardous waste. The permitted use or disposal of hazardous materials does not represent an environmental concern if no releases have occurred and there are no violations associated with these activities. Other listed sites include closed LUSTs, historical gasoline stations, Active or Historical USTs, and Aboveground Storage Tanks (ASTs) that have had no reported releases. Based on the distance of these sites from the Project footprint and their regulatory status, the majority of the listings have a very low probability of affecting soil or groundwater within the hazards RSA.

Several properties identified in the records review were determined to represent potential environmental concerns. High-risk and critical-risk sites within $\frac{1}{10}$ mile of the Coast Subdivision are presented in Table 3.10-1. Appendix E includes a summary of low-risk, moderate-risk, high-risk, critical-risk, and indeterminant-risk sites within $\frac{1}{10}$ mile of the Coast Subdivision. The following critical-risk sites are located along the Coast Subdivision:

- 880 Doolittle Drive in San Leandro, approximately 432 feet northwest of the Coast Subdivision.
- 10800 Edes Avenue in Oakland, approximately 623 feet north-northwest of the Coast Subdivision.
- 701 105th Avenue in Oakland, approximately 114 feet north-northwest of the Coast Subdivision.

The history of these critical-risk sites along the Coast Subdivision and contamination on site are described in greater detail in Table 3.10-1. Hazardous materials listings in the hazards RSA are shown in Figure 3.10-1 through Figure 3.10-4.

Table 3.10-1. Critical and High-Risk Sites within the Contamination RSA (1/2 mile) of the Coast Subdivision

Risk Ranking	Map ID(s)	Facility Type	Address	Approximate Distance (feet) and Direction from Project Footprint	Location of Information	Listing Status
High Risk	A256	Service Station	9757 San Leandro, Oakland	10 NNW	LUST list	Status: Open.
KISK	A257		Oakialiu			
	otential contam ing and parking	_	soline. Potential medium of co	oncern includes groundwate	r. The site is curr	ently used as a semi
High Risk	297	Chemical Manufacturing	2205 Lewelling Blvd, San Leandro	21 NW	SEMS- ARCHIVE	Status: Certified.
		inants of concern include hig ling foundations remain.	gh levels of copper and compo	ounds, lead, and zinc. All buil	dings on the site	have been
High Risk	C362	Gas Station	670 98th Ave, Oakland	31 NNW	LUST list	Status: Open. Assessment & Interim Remedial Action as of 1/1/1990.
		ntaminant of concern is gasol d the USTs removed from the	ine and the potential medium e site in 1983.	of concern is groundwater.	The station build	ling and was
Critical	F613	Foundry	701 105th Ave, Oakland	114 NNW	DEED	Status: Certified
Risk					HAZNET	0&M (Operations and Maintenance)
					ENVIROSTOR	Land Use Restrictions Only
						as of 6/18/2019.

Details: The site was formerly occupied as a foundry, which resulted in contamination. Potential contaminants of concern include antimony and compounds, arsenic, cobalt, lead, and Polycyclic Aromatic Hydrocarbons (PAHS). The potential media affected is soil.

Table 3.10-1. Critical and High-Risk Sites within the Contamination RSA (1/8 mile) of the Coast Subdivision

Risk Ranking	Map ID(s)	Facility Type	Address	Approximate Distance (feet) and Direction from Project Footprint	Location of Information	Listing Status
High Risk	56	Agricultural Manufacturing	2230 & 2242 Davis Court, Hayward	140 NW	CPS-SLIC	Status: Open. Site Assessment as of 1/22/2018.
			iesel, lead, PAHS, trichloroethy inking water supply, soil vapor			, and lubricating oil.
High Risk	L60	Auto Shop	7324 Wells Ave, Newark	160 SSE	CPS-SLIC CHMIRS	Status: Open. Verification Monitoring as of 9/9/2004.
petroleum		TPH). Potential media of co	ead, methyl tert-butyl ether (M. oncern are groundwater (uses on 3636 Smith St, Union City			
Risk	T73	corporation raid	3030 Simen St, Offion City	173 NW	LOST list	Assessment as of 4/1/1985.
corporatio		maintenance and refueling	cern. Groundwater is the poter of vehicles (mostly school bus			0
High Risk	DU763	Concrete Wall Sawing Company	2501 Grant Ave, San Lorenzo	180 NW	CPS-SLIC	Status: Open. Site Assessment as of 9/17/1990.
Details: P investigat		nants of concern include a	rsenic, chromium, copper, lead	and nickel. The potential m	edia of concern a	are under
High Risk	BU806	Electroplating Facility	10319 & 10323 Pearmain Street, Oakland	199 NNW	ENVIROSTOR	Status: Certified as of 5/10/2006.

Table 3.10-1. Critical and High-Risk Sites within the Contamination RSA (1/8 mile) of the Coast Subdivision

Risk Ranking	Map ID(s)	Facility Type	Address	Approximate Distance (feet) and Direction from Project Footprint	Location of Information	Listing Status
		response site or NPL. Past us ected media are contaminated	ses that caused contamination d surfaces/structures.	n include metal plating. Pote	ntial contaminar	nts of concern include
High Risk	V185	Electroplating Facility	10132 Edes Ave, Oakland	265 NNW	SEMS- ARCHIVE	Status: Certified/ O&M as of 4/30/2012.
	otential contamin ectroplating facil		als and other contaminants. I	Potential media of concern a	re soil and soil va	apor. The site is a
High	R219	Oil Company	3111 Depot Rd, Hayward	285 NW	CPS-SLIC	Status: Open.
Risk					LUST	Remediation as of $10/14/2021$.
	perations consis		soline, other chlorinated hydr	ocarbons, tetrachloroethene	(PCE) TCE and	
repackagi	ng.	tomy of the storage and dist	ribution of petroleum produc	ts in their original container		
High	BF246	Adhesives	6925 Central St, Newark	ets in their original container		Status: Open.
High Risk					rs and limited eth	Status: Open. Verification Monitoring as of
High	BF246	Adhesives			CPS-SLIC SEMS-	Status: Open. Verification
High Risk	BF246 BF247	Adhesives Manufacturing Company		315 SSE	CPS-SLIC SEMS- ARCHIVE RCRA-LQG	Status: Open. Verification Monitoring as of 8/1/2019.
High Risk	BF246 BF247	Adhesives Manufacturing Company	6925 Central St, Newark	315 SSE	CPS-SLIC SEMS- ARCHIVE RCRA-LQG	Status: Open. Verification Monitoring as of 8/1/2019.

Details: Potential contaminants of concern are not specified. An aquifer used for drinking water supply, indoor air, and soil vapor are the potential media of concern. Since 2016, dry cleaning operations appear to have changed from the former solvent-based system to a "green-based" system.

Table 3.10-1. Critical and High-Risk Sites within the Contamination RSA (1/8 mile) of the Coast Subdivision

Risk Ranking	Map ID(s)	Facility Type	Address	Approximate Distance (feet) and Direction from Project Footprint	Location of Information	Listing Status
High Risk	GR1184	Pipe And Foundry Company	1295 Whipple Rd, Union City	381 NNW	SEMS- ARCHIVE	Status: Refer Othe Agency.
Details: T unspecifie		a tiered permit site. Past u	ses that caused contamination,	potential media of concern a	nd potential affe	cted media are
Critical Risk	ID1321	Aerospace	880 Doolittle Dr, San	432 NW	CPS-SLIC	Status: Certified/
	ID1322	Manufacturing And Maintenance	Leandro		HAZNET	0&M as of 1/25/2013.
	мапцепансе			LUST	1/23/2013.	
					DEED	
					ENVIROSTOR	
rocket noz High		t parts on the property. The Industrial Laundry	oncern. The potential affected rehere were four TCE degreasing 30305 Union City Blvd,			Status: Open.
Risk	DD482	Facility	Union City		CPS-SLIC	Remediation as of 1/1/2015.
			ude gasoline, Stoddard solvent r drinking water supply and gro			
	DJ501	Industrial Manufacturing	24747 Clawiter Rd, Hayward	480 NW	CPS-SLIC	Status: Open. Site Assessment as of

Details: Potential contaminants of concern include 1,1,1-trichloroethane (TCA), acetone, benzene, dichloroethane (DCE), diesel, ethylbenzene, freon, gasoline, kerosene, other chlorinated hydrocarbons, other insecticides/pesticide/fumigants/herbicides, other solvent or non-petroleum hydrocarbon, PCE, toluene, TCE, VC, waste oil/motor/hydraulic/lubricating, and xylene. Potential medium of concern includes groundwater.

Table 3.10-1. Critical and High-Risk Sites within the Contamination RSA (1/8 mile) of the Coast Subdivision

Risk Ranking	Map ID(s)	Facility Type	Address	Approximate Distance (feet) and Direction from Project Footprint	Location of Information	Listing Status
High	DN530	Waste Management/	6880 Smith Ave., Newark	485 SSE	PADS	Status: Active As of
Risk	DN531 DN532	Used Oil Recycling			SEMS- ARCHIVE	11/22/2004.
	DN552				RCRA-LQG	
					RCRA-TSDF	
					2020 COR ACTION	
					CHMIRS	
High	DS546	Truck Manufacturing	20201 Mack St, Hayward	495 NW	CPS-SLIC	
Risk Details: P	otential contami	Company inants of concern include DC	E and other chlorinated hydr	ocarbons. The potential med		Status: Verification Monitoring as of 6/11/2019.
	otential contami JD1435		E and other chlorinated hydr 13778 Doolittle Dr, San Leandro	ocarbons. The potential med 497 NW		Monitoring as of 6/11/2019.
Details: P High Risk Details: P	JD1435	inants of concern include DC Dry Cleaner inants of concern include DC	13778 Doolittle Dr, San	497 NW	lia of concern are CPS-SLIC	Monitoring as of 6/11/2019. e not specified. Status: Open. Assessment & Interim Remedial Action as of 9/27/2017.
Details: P High Risk Details: P groundwa High	JD1435 otential contami	inants of concern include DC Dry Cleaner inants of concern include DC	13778 Doolittle Dr, San Leandro E, PCE, TCE, and vinyl chlorid	497 NW	lia of concern are CPS-SLIC n include indoor LUST	Monitoring as of 6/11/2019. e not specified. Status: Open. Assessment & Interim Remedial Action as of 9/27/2017. air, other Status: Refer Other
Details: P High Risk Details: P groundwa	JD1435 otential contami ter, soil, and soil	inants of concern include DC Dry Cleaner inants of concern include DC I vapor.	13778 Doolittle Dr, San Leandro E, PCE, TCE, and vinyl chlorid	497 NW Le. Potential media of concer	lia of concern are CPS-SLIC n include indoor	Monitoring as of 6/11/2019. e not specified. Status: Open. Assessment & Interim Remedial Action as of 9/27/2017. air, other

Table 3.10-1. Critical and High-Risk Sites within the Contamination RSA (1/2 mile) of the Coast Subdivision

Risk Ranking	Map ID(s)	Facility Type	Address	Approximate Distance (feet) and Direction from Project Footprint	Location of Information	Listing Status
		inants of concern include or ia affected are unspecified.	rganic liquids with metals, po	lymeric resin waste, unspecif	ed organic liquic	l mixture, waste oil,
High Risk	1618	Dry Cleaner	2250 Marina Blvd, San Leandro	584 NW	CPS-SLIC	Status: Open-Site Assessment as of 8/5/2020.
Details: Pinvestigat		inants of concern include Po	CE and TCE. Potential media	of concern include indoor air,	soil vapor, and o	ther media under
High	DS674	Truck Manufacturing/	20234 Mack Street,	595 NW	CPS-SLIC	Status: Open.
Risk	DS676	Repair And Transit	Hayward		CEMC-	Verification Monitoring as of
	DS677				ARCHIVE	5/25/2018.
			CE, ethylbenzene, other chlor otential medium of concern is	rinated hydrocarbons, other so s groundwater.	olvent or non-pet	roleum
High Risk	EU704	Gas Station	7275 Thornton Ave, Newark	610 SSE	LUST	Status: Open. Eligible for closure as of 6/28/2021.
Details: T	he potential con	taminant of concern is gaso	oline. The potential medium o	of concern is groundwater.		
Details: T High Risk	The potential con	taminant of concern is gaso Heat Treating And Brazing Company	oline. The potential medium o 2342 American Ave, Hayward	of concern is groundwater. 610 NW	SEMS- ARCHIVE	Status: Open. Assessment &
High		Heat Treating And	2342 American Ave,			•

Details: Potential contaminants of concern include chlorinated solvents (TCE). Potential media of concern include an aquifer used for drinking water supply, indoor air, other groundwater, soil, soil vapor, well used for drinking water supply, and other media under investigation.

Table 3.10-1. Critical and High-Risk Sites within the Contamination RSA (1/2 mile) of the Coast Subdivision

Risk Ranking	Map ID(s)	Facility Type	Address	Approximate Distance (feet) and Direction from Project Footprint	Location of Information	Listing Status
Critical	K01677	Plant Nursery,	10800 Edes Ave, Oakland	623 NNW	DEED	Status: Certified
Risk	K01678	Construction And Demolition Business			HAZNET	O&M-Land Use Restrictions Only.
		2 00.10.10.10			US BROWN- FIELDS	Treeser Tourism Stray.
		nants of concern include lea	d, PAHs, TPH-motor oil, and TP	H-diesel. Soil is the potentiall	ly affected mediu	ım. The site is
currently ι	indeveloped.					
High	FG793	Storage Facility	6800 Overlake Place, Newark	650 S	CPS-SLIC	Status: Open. Remediation as of 8/2/2016.
High Risk Details: Peappear to	FG793 otential contami	inants of concern include conat was imported to the site		nc. Soil is the potential medint of the property for use as a	um of concern. T a storage facility	Remediation as of 8/2/2016. The elevated metals
High Risk Details: Peappear to Excavation	FG793 otential contami	inants of concern include conat was imported to the site of the slag beneath a cap hat Construction Product	Newark opper, lead, other metal, and zi e as fill material. Redevelopmen	nc. Soil is the potential medint of the property for use as a	um of concern. T a storage facility	Remediation as of 8/2/2016. The elevated metals is planned. Status: Open.
High Risk Details: Peappear to	FG793 otential contami be within slag the and relocation	inants of concern include co nat was imported to the site of the slag beneath a cap ha	Newark Opper, lead, other metal, and zi e as fill material. Redevelopment as been proposed and is curren	nc. Soil is the potential medi nt of the property for use as a ntly in a public comment per	um of concern. T a storage facility iod.	Remediation as of 8/2/2016. The elevated metals is planned.

Details: Gasoline is the potential contaminant of concern. Groundwater is the potential medium of concern. The site is a commercial manufacturing facility located in a commercial district.

Source: SWRCB 2021; DTSC 2021; EDR 2021b

Fruitvale eda Coliseum/Oakland Airport Oakland Coliseum Station KL1681 -E35 HZ1299 HZ1301 HZ1520 HZ1518 E1358 GO1108 Leandro ID1322 METROPOLITAN OAKLAND INTERNATIONAL AIRPORT JO1697 **Oakland** International KE1612 Airport IX1680 KI16434 EB797 FF919 **HAZMAT SITES IN RSA** Permanent EXTENT: 1 SOUTH BAY CONNECT Existing Capitol Corridor (CC) Station County Boundary

Figure 3.10-1. Hazardous Materials Database Listings in the Contamination RSA – Part 1

Figure 3.10-2. Hazardous Materials Database Listings in the Contamination RSA – Part 2

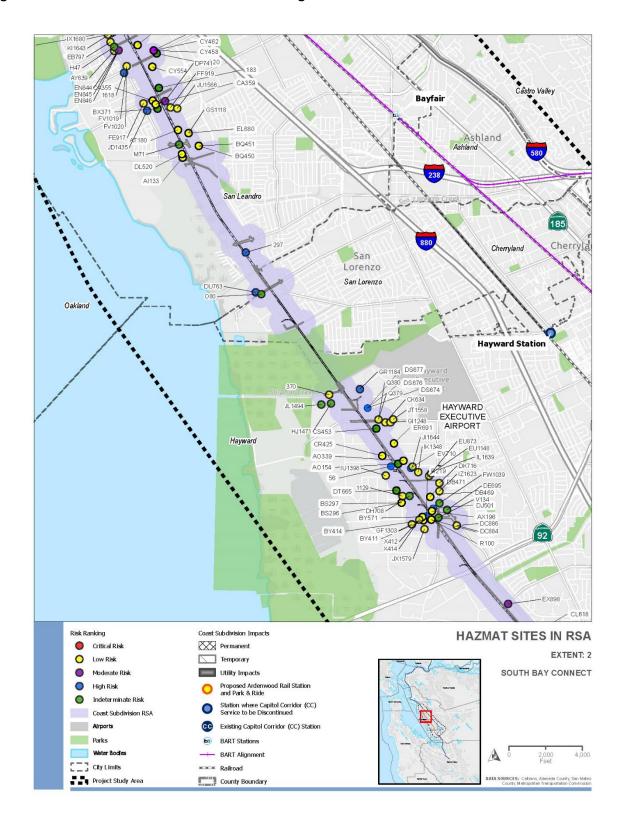


Figure 3.10-3. Hazardous Materials Database Listings in the Contamination RSA – Part 3

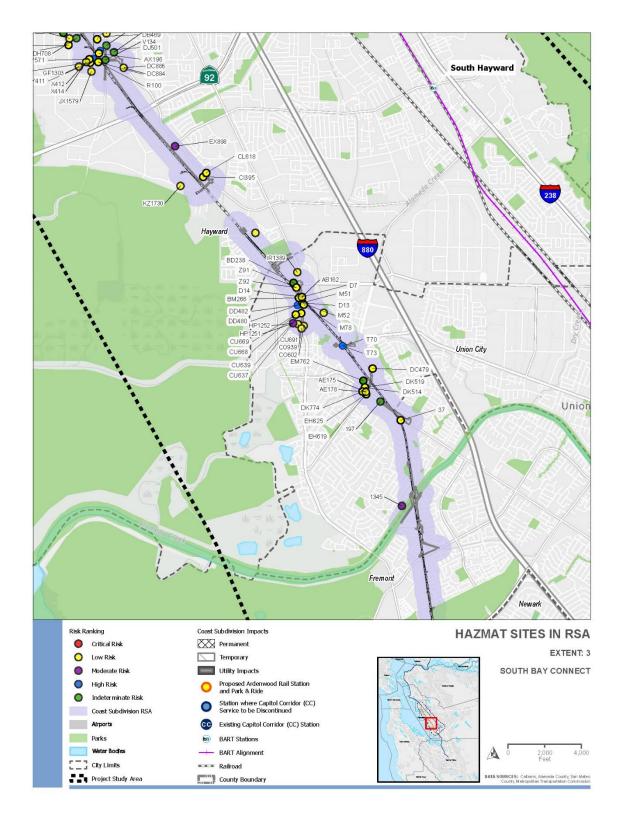
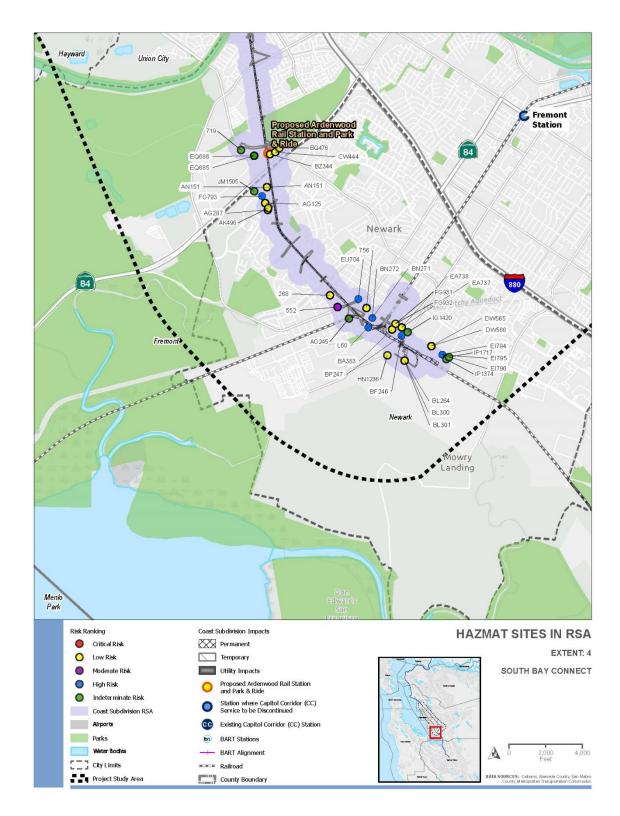


Figure 3.10-4. Hazardous Materials Database Listings in the Contamination RSA – Part 4



Emergency Response and Emergency Evacuation

As discussed in further detail in Section 3.16, Public Services, fire protection services in the region are provided by Alameda County Fire Department (ACFD), Oakland Fire Department (OFD), City of Hayward Fire Department (HFD), Fremont Fire Department (FFD), and East Bay Regional Parks District Fire Department (EBRPDFD). The ACFD (which also serves as the Fire Department for Union City, Newark, San Leandro, and unincorporated Alameda County) has adopted an average response time goal of five minutes or less for 90 percent of the calls for the first responding unit, and 10 minutes or less for 90 percent of the remaining units responding to a first alarm assignment (City of Newark 2013). OFD aims to provide emergency service within seven minutes of notification 90 percent of the time (City of Oakland 2021). HFD meets or exceeds the response goal of putting the first arriving fire company on scene in five minutes or less 90 percent of the time, with the remainder of the required response teams for first alarms on scene in less than eight minutes 90 percent of the time (City of Hayward 2020). FFD has adopted a five minute-thirty second response time goal for 90 percent of all emergency calls. Response times for EBRPDFD are not available online.

As discussed in Section 3.10.2, Regulatory Setting, the 2012 Alameda County Emergency Operations Plan provides an overview of the jurisdiction's approach to emergency operations. Fremont, Oakland, and Newark also have their own local emergency operations plans, as described in Section 3.10.2. These plans generally identify emergency response policies, discuss procedures for emergency evacuation, describe the response and recovery organization, and assign specific roles and responsibilities to County departments, agencies, and community partners. The EOPs have the flexibility to be used for all emergencies to facilitate response and recovery activities in an efficient and effective way (Alameda County 2012).

As discussed in Section 3.10.2, as the Certified Unified Program Agency for Alameda County, the ACDEH coordinates and enforces numerous local, state, and federal hazardous materials management and environmental protection programs in Alameda County. The Hazardous Materials Division enforces spill prevention, through such measures as requiring an SPCC plan at certain facilities. In the event of a spill, the California Office of Emergency Services (State Warning Center) and ACDEH should be contacted.

Fire Hazards

Wildfire risks are described in detail in Section 3.21, Wildfire. As discussed in Section 3.21, CALFIRE has designated VHFHSZs in SRAs and LRAs in Alameda County (Section 3.21; Figure 3.21-5); however, none of these are within the RSA. In addition to SRAs and LRAs, VHFHSZs can also be designated by a local agency (California Fire Code 2019). The following cities and unincorporated areas do not have local VHFHZs within the RSA: Oakland, Hayward, San Leandro, Newark, and Union City. Alameda County has not identified any VHFHSZs within San Lorenzo (Alameda County 2014).

The City of Fremont has designated VHFHSZs within the city that are outside of the SRAs and LRAs proposed by CALFIRE (CALFIRE 2007; City of Fremont 2020). There is one Fremont-designated VHFHSZs within the RSA: Ardenwood Historic Farm (Section 3.21; Figure 3.21-6). The Ardenwood Historic Farm is located east of the Coast Subdivision, north of Ardenwood Boulevard.

Airports within the Airport RSA

Airports in the airport RSA include the Oakland International Airport and the Hayward Executive Airport (Figure 3.10-5 and Figure 3.10-6). The proposed Project is also located within the Oakland International ALUCP AIA and the Hayward Executive Airport ALUCP AIA (ESA Airports 2010a, 2010b).

Schools within the Schools RSA

Private and public schools within a 0.25-mile radius of the Project footprint (Schools RSA) are presented in Figure 3.10-5 through Figure 3.10-7.

3.10.5 Best Management Practices

As noted in Chapter 2, Project Alternatives, CCJPA would incorporate a range of BMPs to avoid and minimize adverse effects on the environment that could result from implementation of the proposed Project. BMPs are included in the proposed Project description, and the impact analyses were conducted assuming application of these practices. The BMPs relevant to hazards and hazardous materials are listed below. Full descriptions of the BMPs are provided in Chapter 2, Project Alternatives.

BMP HAZ-1	Prepare a Construction Hazardous Materials Management Plan (HMMP).
BMP HAZ-2	Property Acquisition Phase 1 and Phase 2 Environmental Site Assessments.
BMP HAZ-3	Prepare a General Construction Soil Management Plan.
BMP HAZ-4	Prepare Parcel-Specific Soil Management Plans and Health and Safety Plans (HASP).
BMP HAZ-5	LUST Sites and Coordination with DTSC.
BMP HAZ-6	Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered.
BMP HAZ-7	Pre-Demolition Investigation.
BMP WF-1	Prepare Fire Prevention Plan.
BMP WF-2	Use Drought-Tolerant and Fire-Resistant Native Plants.
BMP TR-1	Transportation Management Plan (TMP).

Lodestar, A Lighthouse Community Public School Aspire Lionel Wilson College Preparatory Academy Leandro METROPOLITAN OAKLAND INTERNATIONAL AIRPORT Madison Middle Oakland International Airport **Learning Clock** Montessori School - Preschool KIPP King Collegiate High KIPP Summit Academy Kidango - Bay Center - Preschool San Lorenzo **Bay Elementary School** HAYWARD Hayward EXECUTIVE AIRPORT Coast Subdivision Impacts School In Haszard RSA HAZMAT SITES IN RSA Permanent Permanent Coast Subdivision RSA EXTENT: 5 SOUTH BAY CONNECT and Park & Ride Station where Capitol Corridor (CC) Service to be Discontinued Project Study Area Existing Capitol Corridor (CC) BART Alignment BART Stations County Boundary

Figure 3.10-5. Schools within 0.25 mile of the Project Footprint (Schools RSA) - Part 1

Center - Preschool Hayward Hay Bay Elementary School Hayward Station HAYWARD EXECUTIVE AIRPORT Airport Life Chiropractic College West -Private college South California Crosspoint Academy - High school Union City Alvarado Elementary School Itliong-Vera Cruz Middle School Safari Kid - Unio Coast Subdivision Impacts School in Haszard RSA HAZMAT SITES IN RSA Permanent Coast Subdivision RSA **EXTENT: 6** Temporary Airports SOUTH BAY CONNECT Parks Proposed Ardenwood Rall Station and Park & Ride Water Bodies City Limits Station where Capitol Corridor (CC) Service to be Discontinued Project Study Area Existing Capitol Corridor (CC) Station BART Alignment **BART Stations** County Boundary

Figure 3.10-6. Schools within 0.25 mile of the Project Footprint (Schools RSA) – Part 2

Alvarado Elementary School Itliong-Vera Cruz **Union City** Safari Kid - Union City Middle School Preshool Union City Adventure Montessori Academy - Preschool Alvarado KinderCare Preschool Fremont Station Safari Kid - Newark Little Flowers Montessori -Preschool Kindergarten Challenger School -Ardenwood H. A. Snow Elementary wark **New Horizons** School Lincoln Elementary School Coast Subdivision Impacts School In Haszard RSA HAZMAT SITES IN RSA Permanent Permanent Coast Subdivision RSA EXTENT: 7 Airports SOUTH BAY CONNECT Parks Proposed Ardenwood Rail Station and Park & Ride Station where Capitol Comdor (CC) Service to be Discontinued Project Study Area Existing Capitol Comdor (CC) BART Alignment BART Stations Rallroad County Boundary

Figure 3.10-7. Schools within 0.25 mile of the Project Footprint (Schools RSA) - Part 3

3.10.6 Environmental Impacts

This section describes the potential environmental impacts related to hazards and hazardous materials as a result of implementation of the proposed Project. Lettering shown within title for each environmental factor below correlates with CEQA Statute and Guidelines, Appendix G table lettering and numbering.

3.10.6.1 (a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes. Therefore, the No Project Alternative would result in no impacts.

Proposed Project

Construction

Less than Significant Impact. Construction would involve the handling, storage, transport, and disposal of hazardous materials. During construction, the use of hazardous materials and substances would be required, and hazardous wastes would be generated during operation of construction equipment. Hazardous materials used in construction would include, but are not limited to, vehicle fuels, asphalt/concrete, lubricants, drilling fluids, and paints. Using these materials, including their routine transport and disposal, carries the potential for an accidental release into the local environment.

Equipment fueling would likely occur using temporary aboveground storage tanks and fuel trucks at specified staging and laydown areas. Other potentially hazardous materials used in smaller quantities (for example, paints and asphalt) would be stored using specialized containment, such as sheds or trailers. If a spill of these materials were to occur, the accidental release could pose a hazard to construction employees, the public, and the environment depending on the magnitude and location of the spill and relative hazard of the material released. Although typical construction management practices limit and often eliminate the risk of such accidental releases, the extent and duration of proposed Project construction presents a possible risk to the environment through the routine use of hazardous materials. Handling such materials would occur during short-term construction activities and would be subject to federal and state regulations and local health and safety requirements. Typical requirements include temporary storage BMPs, containment in closed containers, characterization of waste material for disposal, and disposal at facilities that are equipped and licensed to handle waste with specified characteristics.

In addition to the use of construction-related hazardous materials, known and unknown sources of contaminated soil and groundwater are also expected to be encountered during soil excavations and dewatering activities, which would require specialized handling, treatment, and potentially off-site transport and disposal. As shown in Figure 3.10-1 through Figure 3.10-4, multiple hazardous

materials listings exist within the hazards RSA. For this reason, per CCR Title 22, Division 4.5 regulations, excavation, handling, transport, and disposal must be conducted by a licensed hazardous waste transporter. Depending on the contaminant and concentrations encountered, contaminated soils and groundwater would be disposed of at an approved facility in accordance with all applicable local, state, and federal laws and regulations.

The potential hazards generated by the routine transport, use, and disposal of hazardous materials, contaminated soils, and/or contaminated groundwater during construction are not anticipated to have a significant impact, if adequately managed according to applicable laws, regulations, and industry BMPs. With the implementation of BMP HAZ-1: Prepare a Construction Hazardous Materials Management Plan (HMMP), construction impacts would be considered less than significant.

Operation

Less than Significant Impact. Long-term operational activities and practices involving routine transport, use, and storage of potentially hazardous materials for railroad maintenance, including shipments in tankers on the railroads, would remain similar to existing conditions. Future operations within the RSA would continue to involve routine transport of hazardous materials and wastes, such as gasoline, brake fluids, and coolants. Heavy maintenance activities would continue off site at existing maintenance facilities and would not be affected by the proposed Project. As discussed, the proposed Project would comply with standard regulations and policies regarding the routine transport, use, storage, handling, and disposal of potentially hazardous materials during operations in order to protect human health and the environment. Therefore, long-term impacts would be considered less than significant.

3.10.6.2 (b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes. Therefore, the No Project Alternative would result in no impacts.

Proposed Project

Construction

Less than Significant Impact. Ground-disturbing activities on the Coast and Niles Subdivisions, such as excavations, the removal and addition of tracks, modification of tracks, grade crossing improvements, new or extended siding, installation of new structures and construction of Ardenwood Station, may have the potential to disturb known and unknown contaminated soil or groundwater. As shown in Table 3.10-1, a number of high-risk sites along the Coast Subdivision in the hazards RSA have been listed on various hazardous materials databases. Ground disturbance

and structure demolition at identified hazardous materials sites could result in a hazardous materials release into the environment.

The proposed Project involves multiple waterway crossings. Construction work over waterbodies would involve spill prevention and control BMPs. As discussed in Section 3.11, Hydrology and Water Quality, the proposed Project would require permitting for work near waterbodies and would be subject to compliance with standard federal, state, and local regulations and policies related to water quality during construction of the proposed Project.

Due to the close proximity of the Project footprint to existing hazardous materials listings, potential exposure to contaminated soil and/or groundwater or contaminant migration could result. Construction of belowground elements could encounter soils and groundwater contaminated with hazardous materials, which could release volatile contaminant vapors during excavations or other ground-disturbing activities.

In addition, based on the age (pre-1970s) of many of the buildings within the RSA, it is possible that these buildings were constructed when ACM and LBPs were readily used. Acquisition of property and structure demolition would be required for construction of the proposed Project. However, demolition of structures containing LBP and ACM requires specific remediation activities regulated by federal, state, and local laws and regulations. As a result, the likelihood of the Project resulting in the accidental release of ACM or LBP into the environment is considered low. With the implementation of **BMP HAZ-1** through **BMP HAZ-7**, any reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be avoided. Therefore, with the implementation of **BMP HAZ-1** through **BMP HAZ-7**, impacts associated with construction activities would be considered less than significant.

Operation

Less than Significant Impact. Operation of the proposed Project would involve the use of hazardous materials and wastes, such as gasoline, brake fluids, and coolants, that could be subject to accidental releases. The handling of such materials would be subject to federal and state regulations, local health and safety requirements, and UPRR hazardous materials and wastes policies and standards. In general, they require that these materials not be released to the environment or disposed of as general refuse. Collection in proper containers and disposal at approved facilities is required. Therefore, operational impacts would be considered less than significant, and no mitigation measures are required.

3.10.6.3 (c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes. Therefore, the No Project Alternative would result in no impacts.

Proposed Project

Construction

Less than Significant Impact. During construction, commercially available hazardous materials such as gasoline, brake fluids, coolants, and paints would be used and would also involve the production, removal, and transport of hazardous materials. Therefore, the proposed Project could potentially result in hazardous releases near schools within 0.25 mile of the proposed Project. As shown in Figure 3.10-5 through Figure 3.10-7, approximately 21 schools are located within 0.25 mile of the proposed Project. However, with the implementation of **BMP HAZ-1** through **BMP HAZ-7**, short-term impacts would be considered less than significant.

Multiple construction vehicles would be operated within the Project footprint over the construction duration, which could result in emissions of air pollutants in the vicinity of an existing school. Fuel combustion results in the release of pollutants that can be considered hazardous, such as VOC. Air pollutants produced by motor vehicle fuel combustion are addressed in Section 3.4, Air Quality. As described in Section 3.4, BMPs would be implemented in order to reduce emissions and dust near schools and other sensitive receptors during construction. Therefore, impacts would be considered less than significant and no mitigation measures are required.

Operation

Less than Significant Impact. As discussed previously, future operations within the hazards RSA would involve routine transport of hazardous materials and wastes. However, the proposed Project would comply with standard regulations and policies regarding the routine transport, use, storage, handling, and disposal of potentially hazardous materials during operations in order to protect human health and the environment. Therefore, long-term impacts would be considered less than significant during operations.

3.10.6.4 (d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes. Therefore, the No Project Alternative would not create a significant hazard to the public or the environment.

Proposed Project

Construction

Less than Significant Impact. As shown in Table 3.10-1, a number of high-risk sites along the Coast Subdivision have been listed on various hazardous materials databases in the hazards RSA and have

been assigned a ranking based on their potential to affect the environment as a result of ground-disturbing activities.

The close proximity of these existing hazardous materials listings to Project-related permanent and temporary construction impact areas would carry the potential for encountering contaminated soil and/or groundwater. Figure 3.10-1 through Figure 3.10-4 provides the locations of these hazardous materials listings within the hazards RSA that may be affected by pre-existing contamination. A summary of hazardous materials listings within $\frac{1}{8}$ mile of the Coast Subdivision is provided in Appendix E.

Implementation of **BMP HAZ-1**, included as part of the proposed Project, would limit the potential for impacts through early identification of potential soil and groundwater contamination within the hazards RSA. Construction activities associated with the proposed Project could occur on or near sites included on hazardous materials database listings and have the potential to disturb contaminated soil or groundwater. However, with the implementation of **BMP HAZ-3** through **BMP HAZ-6**, impacts associated with construction activities would be considered less than significant and no mitigation is required.

Operation

No Impact. Operation of the proposed Project does not require ground disturbance. As such, long-term impacts associated with the sites above would not result in a potential release of hazardous materials. Therefore, no long-term impacts are anticipated.

3.10.6.5 (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes. Therefore, the No Project Alternative would not result in a safety hazard or excessive noise associated with being within an airport land use plan.

Proposed Project

Construction and Operation

Less than Significant Impact. The Coast and Niles Subdivisions are both located within two miles of the Oakland International Airport and the Hayward Executive Airport. The subdivisions are also located within the Oakland International ALUCP AIA and the Hayward Executive ALUCP AIA. The ALUCPs for the airports include policies intended to reduce the risk of harm to people and property located within the AIAs and focus on four impact areas: noise, safety, airspace protection, and overflight. Land uses that may cause visual, electronic, navigational, or bird strike hazards to aircraft

in flight shall be allowed within the airport influence area only if the uses are consistent with FAA rules and regulations. Specific characteristics to be avoided include:

- 1. Glare or distracting lights that could be mistaken for airport lights;
- 2. Sources of dust, heat, steam smoke, or thermal plumes that may impair pilot vision or create turbulence within flight path;
- Sources of electrical or other interference that could affect aircraft communications or navigation; and
- 4. Any proposed use that creates an increased attraction for wildlife (ESA Airports 2010a, 2010b).

Improvements at the grade crossings would involve automatic flashing warning lights that would turn on intermittently throughout the day and would be similar to existing conditions. Other permanent lighting would also be consistent with the lighting in the existing vicinity given the industrial and commercial land uses that surround the hazards RSA. Lighting would be required on a temporary basis during construction; however, construction would be limited to daytime hours, when possible, and would be similar to existing sources of light in the hazards RSA.

No Project activities are proposed that would create sources of thermal plumes, electrical interference, or water vapor. Proposed Project activities are industrial in nature and would not attract wildlife. Given the industrial nature of the proposed Project, the Project would be considered a noise-compatible land use and activities associated with the land use may be carried out with essentially no interference from aircraft noise (ESA Airports 2010a, 2010b). Properties within an AIA are routinely subject to overflights by aircraft. However, this would not result in a safety hazard for people residing or working in the hazards RSA during construction and operations. Overflights by aircraft would occur intermittently throughout the day and would therefore not result in increased noise hazards over an extended period of time. Noise levels as a result of the proposed Project are discussed in detail in Section 3.14, Noise and Vibration.

Tall structures are prohibited at properties within the AIAs and ALUCPs. The proposed Project does not include structures that are tall enough to create a hazard to aircraft. Cranes and other equipment or scaffolding structures needed for construction would also be far enough away from the airport to avoid hazards and would be on site only temporarily. Based on these factors, impacts would be less than significant and no mitigation would be required.

3.10.6.6 (f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes. Therefore, the No Project Alternative would not result in impairment or interference with an adopted emergency response or evacuation plan.

Proposed Project

Construction

Less than Significant Impact. During construction, roads may be temporarily impeded due to operation of construction equipment. To the extent possible, construction equipment would be staged in designated areas while not in use.

Implementation **BMP TR-1: Transportation Management Plan** would reduce potential traffic impacts during construction and would include detours and alternate routing. Additionally, the proposed Project would not change any emergency response plan routes. Therefore, impacts associated with construction activities would be less than significant.

Operations

Less than Significant Impact. While no state or federal standards for response times have been established for the purposes of identifying CEQA thresholds of significance, the California High Speed Rail Authority San Jose to Merced Project Section Draft EIR/EIS (April 2020) indicated that a conservative CEQA threshold of significance for change in emergency vehicle access times would be 30 seconds (i.e., 10 percent of 600 seconds or five minutes). According to Section 3.18, Transportation, it is assumed that freight service on the Coast Subdivision stays similar to No Project levels (to be conservative). The proposed Project would result in only a slight increase in access time. Based on these factors, impacts on an emergency response plan or emergency evacuation plan would be less than significant.

3.10.6.7 (g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes. There would be no changes to rail connectivity or operational efficiency. Therefore, the No Project Alternative would not expose people or structures to potential wildland fires and no impacts are anticipated to occur.

Proposed Project

Construction

Less than Significant Impact. As discussed in Section 3.21, Wildfire, construction would comply with UPRR standards as well as all state and local fire safety codes and regulations applicable within the VHFHSZs, such as restrictions on the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment with an internal combustion engine; safe use of gasoline-powered tools in fire hazard areas; and required fire suppression equipment that must be provided on site for various types of work in fire-prone areas. With implementation of **BMP WF-1**, these restrictions would also be applicable near (within 500 feet of) a VHFHSZ. The

Project would also comply with OSHA safety requirements and hazardous material storage BMPs included in the Project's Storm Water Pollution Prevention Plan (SWPPP), which would ensure the safe storage of ignitable materials.

Operations

Less than Significant Impact. Project operation would not exacerbate wildfire risks as the Project would comply with UPRR design standards and maintenance practices. Design of the rail system would comply with National Fire Protection Association (NFPA) fire protection requirements. Ongoing vegetation removal is required by UPRR as part of its regular maintenance within its ROW. UPRR (2021) requires 12 feet on either side of track centers be cleared of vegetation for main lines sidings, and industrial lead tracks. Additional vegetation clearance is required at bridges, public crossings, around buildings, stations and platforms, and around signs and signals. UPRR would continue vegetation clearance along all subdivisions as part of proposed Project operation. Due to UPRR's ongoing vegetation clearing, rail operation would not cause vegetation fires as a result of sparks or contact with the underside of both passenger and freight rail cars.

Shifting of passenger rail facilities from the Niles to Coast subdivisions shifts passenger rail outside of VHFHSZs. Although Ardenwood Historic Farm is a VHFHSZ, it is isolated from other VHFHSZs. Moving passenger rail out of a large VHSHZ to outside an isolated VHFHSZ reduces overall risk to passengers. Based on these factors, impacts from wildfire would be less than significant.

3.10.7 Mitigation Measures

No mitigation measures for hazards and hazardous materials are required for the proposed Project.

3.10.8 Cumulative Impact Analysis

The cumulative RSA for hazards and hazardous materials consists of the Project footprint and a 0.25-mile buffer. The cumulative RSA was developed in order to capture the potential for the proposed Project, and other relevant future planned projects in the area, to disturb contaminated sites or hazardous listings, create additional hazards for workers and sensitive receptors (that is, construction or operation near airports, private air strips, and schools), create or exacerbate fire hazards, or interfere with an emergency response or emergency evacuation plan.

Under the cumulative condition, ongoing urban and industrial practices are expected to continue within the cumulative RSA through the 2025 and 2040 planning horizons. Historically, the cumulative RSA has had general areas of hazardous materials and waste concerns, including transportation of hazardous materials and wastes; potential hazardous substances associated with building materials, road, and railway corridors, utility corridors, industrial facilities; naturally occurring hazards; school facilities; oil and gas wells; and hazardous materials database listings. Population increases in the Project Study Area are anticipated to contribute incrementally to the transport, storage, use, and disposal of hazardous materials and wastes in the cumulative RSA.

The cumulative transportation and industrial projects in the Project Study Area would require the use, transport, and disposal of chemicals and hazardous materials, such as vehicle fuels, coolants, gasoline, oils, lubricants, drilling fluids, and paints during construction and operations, similar to those needed for the proposed Project. The use of these materials presents a risk of releasing hazardous wastes or materials into the environment. In addition to the use of hazardous materials, contaminated soil, and groundwater are also expected to be encountered during soil excavations

and dewatering activities associated with other planned cumulative projects. However, as with the proposed Project, other planned projects would be tightly controlled and subject to federal, state, and local health and safety requirements. Typical requirements include temporary storage BMPs, containment in closed containers, and characterization of waste material for disposal at facilities that are equipped and licensed to handle waste with specified characteristics.

During construction, the Centerville Complete Streets, Centerville Railroad Safety Improvements, Quarry Lakes Parkway Project, and State Route 84 Intermodal Bus Facility have the potential to create hazardous emissions within 0.25 mile of an existing school. These emissions would be temporary and intermittent during the construction phase of each of the planned projects and would likely be controlled by BMPs to reduce emissions to a less than significant level.

Temporary or permanent road closures may be required for the planned projects, which could result in impacts to an emergency response or emergency evacuation plan. However, any road closures proposed under the cumulative projects would require coordination and approval from appropriate agencies and departments within the City and County. The planned projects included in this cumulative analysis would be located predominantly within industrial zones outside of wildlands or very high, high, and moderate fire hazard severity zones and would not create substantial risk to wildfire.

Proposed Project BMPs include preparation of a Construction Hazardous Materials Management Plan (BMP HAZ-1), completion of an Environmental Site Assessment (BMP HAZ-2), preparation of a General Construction Soil Management Plan that includes provisions for how soils will be managed (BMP HAZ-3), parcel-specific soil management plans and health and safety plans (BMP HAZ-4), plans to halt construction work if potentially hazardous materials or abandoned oil wells are encountered (BMP HAZ-6), pre-demolition investigation prior to the demolition of any structures constructed prior to the 1970s (BMP HAZ-7), and implementation of a traffic management plan during construction (BMP TR-1). With implementation of these BMPs, potential impacts from the release of hazardous wastes and materials, disturbance of contaminated sites, emissions near schools, or interference with an emergency response or emergency evacuation plan would be minimized. The proposed Project is located within 2 miles of an airport and within an airport land use plan. However, the proposed Project would comply with policies established to reduce hazards to the public and aircraft from being located within the AIA and proposed land uses would be compatible with the airport land use plan. Portions of the proposed Project are located within VHFHSZs. However, as discussed in Section 3.21, Wildfire, construction would comply with UPRR standards as well as all state and local fire safety codes and regulations applicable within the VHFHSZs. The proposed Project would also implement BMP WF-1 to reduce wildfire risks. Therefore, the proposed Project's contribution to wildfire hazards in the cumulative RSA would not be cumulatively considerable.

The proposed Project, when considered in combination with other planned projects in the cumulative RSA that would also be tightly controlled and subject to federal, state, and local health and safety requirements, would not result in a significant cumulative impact on hazards and hazardous materials.

3.10.9 CEQA Significance Findings Summary Table

Table 3.10-2 summarizes the hazards and hazardous materials impacts of the proposed Project.

Table 3.10-2. CEQA Significance Determination Summary

Impact	Level of Significance Before Mitigation	Incremental Project Contribution to Cumulative Impacts	Mitigation	Level of Significance with Mitigation Incorporated	Incremental Project Cumulative Impact after Mitigation
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	LTS	NCC	N/A	LTS	NCC
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	LTS	NCC	N/A	LTS	NCC
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	LTS	NCC	N/A	LTS	NCC
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	LTS	NCC	N/A	LTS	NCC

Table 3.10-2. CEQA Significance Determination Summary

Impact	Level of Significance Before Mitigation	Incremental Project Contribution to Cumulative Impacts	Mitigation	Level of Significance with Mitigation Incorporated	Incremental Project Cumulative Impact after Mitigation
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	LTS	NCC	N/A	LTS	NCC
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	LTS	NCC	N/A	LTS	NCC
Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	LTS	NCC	N/A	LTS	NCC

Notes: LTS = Less than Significant Impact, NI = No Impact, N/A = Not Applicable, SI = Significant Impact, S/M = Significant Impact but Mitigable to a Less than Significant Level, CC = Cumulatively Considerable, NCC = Not Cumulatively Considerable.

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