

3.9 HAZARDS AND HAZARDOUS MATERIALS

This section describes the environmental and regulatory setting for hazards and hazardous materials. It also describes existing conditions and potential impacts relative to hazards and hazardous materials that would result from implementation of the proposed project, and mitigation for potentially significant impacts, where feasible.

3.9.1 Environmental Setting

Hazardous materials, as defined by the CCR, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic – Causes human health effects
- Ignitable – Has the ability to burn
- Corrosive – Causes severe burns or damage to materials
- Reactive – Causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if they are released into the soil or groundwater, or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. CCR Title 22, Sections 66261.20-24 contain technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Common Hazardous Materials

Asbestos

NOA generally is found in serpentine soils within the Sierra Nevada foothills of California and is considered a hazardous material due to exposure-related public health concerns (Caltrans 2006). The NOA Hazard Map and Humboldt County General Plan were reviewed to determine if the proposed project would involve construction in areas of relative likelihood for the presence of natural occurring asbestos (CGS 2011; Humboldt County 2017c). The majority of the County, and specifically the unincorporated community of Cutten, is not known for the occurrence of NOA.

Many building materials have the potential to contain asbestos cement (AC) and other hazardous materials that, if disturbed, could cause damage to people and the environment. If material containing asbestos is disturbed, tiny fibers can become airborne, which could cause respiratory damage leading to lung disease or other pulmonary complications.



AC pipe is a material commonly installed in the mid-20th century, prior to much of the federal and state legislation regulating this hazardous material. AC pipe is most commonly encountered where public water systems were developed or extended in the 1940s through 1960s. It is a piping material that is safe if left undisturbed. Risk of exposure is limited to activities that disturb the material causing it to become airborne. The proposed project is not likely to require any interaction with AC pipe or other AC materials, and no demolition is anticipated for this project.

Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are mixtures of synthetic chemicals with similar chemical structures. PCBs can range from oily liquids to waxy solids. Because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other applications. More than 1.5 billion pounds of PCBs were manufactured in the U.S. prior to cessation of production in 1977.

PG&E provides electricity to the project area. As the owner of any transformers present on utility poles, PG&E would be responsible for any inspections, testing, reporting, and release response related to PCBs.

Radon

Radon is a carcinogenic, radioactive gas resulting from the natural breakdown of uranium in soil, rock, and water. Radon gas enters a building through cracks in foundations and walls. Once inside the building, radon decay products may become attached to dust particles and inhaled, or the decayed radioactive particles alone may be inhaled and cause damage to lung tissue. The USEPA has established a safe radon exposure threshold of 4 picocuries per liter of air.

According to the USEPA Map of Radon Zones, the County is located in Zone 3 of the USEPA Radon Zone Map (USEPA 2019a). Zone 3 is designated as a low potential radon zone with levels less than 2 picocuries per liter of air and, therefore, is within the safe radon exposure threshold.

The proposed project area is located in a rural area in the unincorporated community of Cutten. The surrounding land uses include forest land to the north, east, and south of the project site, and Redwood Fields Park and existing residences to the west. The timber lands surrounding the project site have historically been used for commercial timber and currently remains undeveloped.

Schools

There are three schools within 0.25 mile of the project site. These schools are listed in Table 3.9-1 below.

Table 3.9-1: Schools Within One Quarter Mile of Project Site

School Name	Address	Approximate Distance and Direction from Proposed Project
Winship Middle School	2500 Cypress Avenue, Eureka, CA 95503	0.10 mile south
Glen Paul School	2501 Cypress Avenue, Eureka, CA 95503	300 feet south
Cutten Elementary School	4182 Walnut Drive Eureka, CA 95503	0.24 mile southwest



Cortese List Government Code Section 65962

The Cortese list, which is compiled pursuant to Government Code Section 65962, is used to confirm compliance with CEQA requirements, and provides a list of known locations of hazardous material release sites. The Envirostor database, which is managed by the Department of Toxic Substances Control (DTSC), and the GeoTracker database, which is managed by the SWRCB, are used to determine the proximity of a project to the nearest hazardous materials site. Active Cortese list cleanup sites, at the time this Draft EIR was written, are shown in Table 3.9-2 below.

Table 3.9-2: Cortese Listed Sites within One-Half Mile of Project Site

Name	Address	DTSC or SWRCB?	Cleanup Listing Status	Approximate Distance and Direction from Project Site
Redwood Acres	3750 Harris Street, Eureka, CA 95503	DTSC	Voluntary Cleanup	0.50 mile northeast
Former Texaco	3988 Walnut Drive	SWRCB	LUST Cleanup Site-Completed/Case Closed	0.20 mile west
Private Residence	Private Residence, Eureka, CA 95503	SWRCB	LUST Cleanup Site-Completed/Case Closed	0.37 mile southwest
ACE Adams & Sons Printing	4137 Walnut Drive, Eureka, CA 95501	SWRCB	LUST Cleanup Site-Completed/Case Closed	0.13 mile southwest
California National Guard Armory	3517 W Street, Eureka, CA 95501	SWRCB	LUST Cleanup Site-Completed/Case Closed	0.20 mile northwest
Chevron #9-1109	2600 Harris Street, Eureka, CA 95501	SWRCB	LUST Cleanup Site-Completed/Case Closed	0.43 mile north

Source: DTSC 2019; SWRCB 2019

Emergency Response and Emergency Evacuation Plans

County Ordinance 2203 established the Humboldt Operational Area and identified the Sheriff as Director of Emergency Services for the County. The Humboldt Operational Area is composed of the County serving as the lead agency, and all political subdivisions (cities and special districts). The Office of Emergency Services (OES) assists the Sheriff in controlling and directing the effort of the emergency organization of the County and is part of the Special Operations Division within the Sheriff's Department. According to the County General Plan, the OES is responsible for maintaining the County's Emergency Operations Plan (EOP), which addresses the planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies in, or affecting, the County. OES also maintains specific hazard response plans for earthquake, flooding, tsunamis, coastal storms, and other events. These response plans are used to determine the most appropriate evacuation routes based on the nature and extent of the hazard. Pre-disaster evacuation route planning is addressed through a variety of efforts, including the FEMA local Hazard Mitigation Plan (HMP) program, the seismic retrofit program for state bridges and overpasses, tsunami response planning, and the application of the CAL FIRE SRA standards for emergency access (Humboldt County 2017c).



Additionally, the Department of the Navy operates military training routes and military operating areas, which traverse central areas of the County. These areas incorporate airspace, and new development within these areas requires notice and consultation with the Department of the Navy in order to ensure compatibility. The proposed project area is not located within one of these military training routes or military operating areas (Humboldt County 2017a).

Airports and Airstrips

The nearest airport to the project site is Murray Field Airport, which is located approximately 2.6 miles northeast of the project site. The proposed project is not located within any airport land use compatibility zones.

3.9.2 Regulatory Setting

Federal

United States Environmental Protection Agency

The USEPA was established in 1970 to consolidate in one agency a variety of federal research, monitoring, standard-setting, and enforcement activities to ensure environmental protection. The USEPA's mission is to protect human health and to safeguard the natural environment—air, water, and land—upon which life depends. The USEPA works to develop and enforce regulations and implement environmental laws enacted by Congress, is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for using permits and for monitoring and enforcing compliance. Where national standards are not met, the USEPA can issue sanctions and take other steps to assist the states and tribes to reach the desired levels of environmental quality.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) set up the federal regulatory program for hazardous substances and gives the USEPA the authority to regulate the generation, transport, treatment, and disposal of hazardous substances in a “cradle to grave” system (USEPA 2019b). Under RCRA, the USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. This regulatory system includes tracking all generators of hazardous waste.

1984 Hazardous and Solid Waste Amendment Act

RCRA was amended by the 1984 Hazardous and Solid Waste Amendment Act, which prohibited the use of certain techniques for the disposal of certain hazardous wastes (USEPA 2016b). The Emergency Planning and Community Right-to-Know Act of 1986 imposes safety requirements to protect local communities in the event of accidental release of hazardous substances. The requirements provide measures so that the risks from interaction with hazardous materials, such as handling, storage, and disposal, are mitigated or prevented. This law protects human health and the environment if the unintended release of hazardous materials was to occur (USEPA 2016c). The USEPA has delegated fulfillment of many of RCRA's requirements to the California DTSC.



State

California hazardous material and waste regulations are equal to or more stringent than federal regulations. The USEPA has granted the state primary oversight responsibility to administer and enforce hazardous waste management programs. Several key state laws pertaining to hazardous materials and wastes are discussed below.

Hazardous Waste Control Act

The Hazardous Waste Control Act created the state hazardous waste management program. It is similar to, but more stringent than, the federal RCRA program. The act is implemented by regulations contained in CCR Title 26, which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling treatment, storage and disposal facilities; operation of facilities and staff training; and closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous, and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with DTSC.

California Environmental Protection Agency and Department of Toxic Substances Control

The California Environmental Protection Agency is responsible for creating and enforcing environmental regulations within California. Within California Environmental Protection Agency is DTSC, which was formed under the Hazardous Waste Control Act. DTSC is responsible for regulating hazardous waste, remediating existing contamination, and identifying ways to reduce production of hazardous wastes. DTSC can delegate enforcement responsibilities to local jurisdictions.

Unified Program

The unified hazardous waste and hazardous materials management regulatory program (Unified Program) is a unified hazardous materials management program that was established by California's Secretary for Environmental Protection following SB1082 (1993). The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following programs:

- Hazardous Materials Release Response Plans and Inventories
- California Accidental Release Prevention Program
- Underground Storage Tank Program
- Above Ground Petroleum Storage Act Program
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements



These six environmental programs are implemented at the local government level by Certified Unified Program Agencies. Certified Unified Program Agencies provide a central permitting and regulatory agency for permits, reporting, and compliance enforcement. California PRC Section 21151.4 sets special requirements for EIRs and negative declarations for projects that involve the construction or alteration of a facility within 0.25 mile of a school that creates the following conditions:

- The project might reasonably be anticipated to emit hazardous air emissions;
- The project would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified in Section 25532(j) of the Health and Safety Code; or
- The project may pose a health or safety hazard to persons who would attend or would be employed at the school.

As part of the CEQA process, the lead agency preparing the EIR must consult with the appropriate school district regarding the potential impact of the project on the school, and the school district must be notified about the project in writing at least 30 days before the proposed certification of the EIR or adoption of the mitigated negative declaration (PRC Section 21151.4; 14 CCR Section 15186[b]).

Cortese List Government Code Section 65962

Government Code Section 65962 was enacted in 1985 and was amended in 1992. It is used as a planning tool to comply with CEQA and requires information about locations of hazardous materials release sites. It states that through the combined efforts of DTSC, the Department of Health Services, the SWRCB, and local enforcement agencies, a list of potentially hazardous areas and sites will be compiled and remain up to date (at a minimum, updated annually). The list is consolidated by the Secretary for Environmental Protection and is distributed to each city and county in which sites on the list are located. The list can be found on DTSC's EnviroStor database, which includes information from the SWRCB's GeoTracker database.

California Department of Transportation

The Caltrans manages interregional transportation, including the management and construction of the California highway system. In addition, Caltrans is responsible for the permitting and regulation of state roadways and requires that permits be obtained for transportation of oversized loads and transportation of certain materials, such as hazardous materials, and for construction-related traffic disturbance.

California Public Resources Code

PRC Section 21151.4 is another key state law pertaining to hazardous materials, and is presented verbatim below:

- (a) An environmental impact report shall not be certified or a negative declaration shall not be approved for any project involving the construction or alteration of a facility within one-fourth of a mile of a school that might reasonably be anticipated to emit hazardous air emissions, or that would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code, that may pose a health or safety hazard to persons who would attend or would be employed at the school, unless both of the following occur:



- (1) The lead agency preparing the environmental impact report or negative declaration has consulted with the school district having jurisdiction regarding the potential impact of the Project on the school.
 - (2) The school district has been given written notification of the Project not less than 30 days prior to the proposed certification of the environmental impact report or approval of the negative declaration.
- (b) As used in this section, the following definitions apply:
- (1) "Extremely hazardous substance" means an extremely hazardous substance as defined pursuant to paragraph (2) of subdivision (g) of Section 25532 of the Health and Safety Code.
 - (2) "Hazardous air emissions" means emissions into the ambient air of air contaminants that have been identified as a toxic air contaminant by the State Air Resources Board or by the air pollution control officer for the jurisdiction in which the Project is located. As determined by the air pollution control officer, hazardous air emissions also means emissions into the ambient air of a substance identified in subdivisions (a) to (f), inclusive, of Section 44321 of the Health and Safety Code. [Amended by Stats. 2008, Ch. 148, Sec. 1. Effective January 1, 2009]

Division of Occupational Safety and Health

The California Division of Occupational Safety and Health Administration is responsible for enforcing workplace safety regulations and requirements in California, including hazardous materials requirements recorded under CCR Title 8. These regulations include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about hazardous substance exposure (such as asbestos), and preparation of emergency action and fire prevention plans.

The California Division of Occupational Safety and Health Administration also enforces hazard-communication program regulations that contain training and information requirements. Such requirements include procedures for identifying and labeling hazardous substances, communicating information about hazardous substances and their handling, and preparing health and safety plans to protect workers and employees at hazardous waste sites. Under the hazard-communication program, employers must make Safety Data Sheets available to employees and document employee information and training programs.

California Emergency Services Act

The California Emergency Services Act provides the basic authority for conducting emergency operations following a proclamation of emergency by the governor and/or appropriate local authorities. Local government and district emergency plans are considered to be extensions of the California Emergency Plan, established in accordance with the Emergency Services Act.

The California Emergency Management Agency (CAL EMA) is the state agency responsible for establishing emergency response and spill notification plans related to hazardous materials accidents. CAL EMA regulates businesses by requiring specific businesses to prepare an inventory of hazardous materials (CCR Title 19). CAL EMA is also the lead state agency for emergency management and is responsible for coordinating the state-level response to emergencies and disasters.



Fire Protection

California state fire safety regulations apply to SRAs during the time of year designated as having hazardous fire conditions. CAL FIRE has developed a fire hazard severity scale that considers vegetation, climate, and slope to evaluate the level of wildfire hazard in all SRAs. An SRA is defined as the part of the state where CAL FIRE is primarily responsible for providing basic wildland fire protection assistance. Areas under the jurisdiction of other fire protection services are considered to be Local Responsibility Areas or, on federal lands, Federal Responsibility Areas.

During the fire hazard season, these regulations include: (1) restrict the use of equipment that may produce a spark, flame, or fire; (2) require the use of spark arrestors on any equipment that has an internal combustion engine; (3) specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and (4) specify fire suppression equipment that must be provided on-site for various types of work in fire-prone areas. CAL FIRE has primary responsibility for fire protection within SRAs.

Local

Humboldt County General Plan

The County General Plan, adopted October 23, 2017, contains several policies that directly pertain to hazards and hazardous materials, including the following:

Goal S-G1. Minimize Loss. Communities designed and built to minimize the potential for loss of life and property resulting from natural and manmade hazards.

Goal S-G2. Prevent Unnecessary Exposure. Areas of geologic instability, floodplains, tsunami run-up areas, high risk wildland fire areas, and airport areas planned and conditioned to prevent unnecessary exposure of people and property to risks of damage or injury.

Goal S-G3. Natural Drainage and Watershed Protection. Natural drainage channels and watersheds that are managed to minimize peak flows in order to reduce the severity and frequency of flooding.

- **Policy S-P1: Reduce the Potential for Loss.** Plan land uses and regulate new development to reduce the potential for loss of life, injury, property damage, and economic and social dislocations resulting from natural and manmade hazards, including but not limited to, steep slopes, unstable soils areas, active earthquake faults, wildland fire risk areas, airport influence areas, military operating areas, flood plains, and tsunami run-up areas.
- **Policy S-P4: Disaster Response Plans.** The County shall prepare and maintain current disaster response plans. The County shall support and participate in the preparation of disaster response plans by community organizations, companies, cities, and state and federal agencies.
- **Policy S-P5: Hazard Mitigation.** The County shall actively seek opportunities to reduce the impacts of disasters through hazard mitigation planning.
- **Policy S-P7: Structural Hazards.** The County shall protect life and property by applying and enforcing state adopted building codes and Alquist-Priolo requirements to new construction.
- **Policy S-P6: Earthquake Mitigation Planning.** The potential for a local earthquake in excess of magnitude 9.0 (Richter scale) shall be considered in disaster planning, risk assessment, and pre-disaster mitigation efforts.



- **Policy S-P11: Site Suitability.** New development may be approved only if it can be demonstrated that the proposed development will neither create nor significantly contribute to, or be impacted by, geologic instability or geologic hazards.
- **Policy S-P12: Federal Flood Insurance Program.** The County shall participate in the Federal Flood Insurance Program and maintain Flood Damage Prevention regulations in the County Code to regulate land uses in flood hazard areas in order to minimize loss of life and property and public flood-related expense.
- **Policy S-P14: Prohibition of Residential Subdivisions within Floodplain.** The creation of new parcels that increase residential density wholly within the 100 year floodplain, as identified in the most recent FEMA flood insurance rate maps, shall be prohibited unless the Board of Supervisors makes specific findings that the potential for loss of life and property can be reduced to less than significant levels.
- **Policy S-P15: Construction Within Special Flood Hazard Areas.** Construction within a floodplain identified as the 100-Year Flood Boundary on FEMA's Flood Insurance Rate Map shall comply with the County's Flood Damage Prevention Regulations. Fill in the floodplain shall only be allowed if it can be demonstrated that the fill will not have cumulative adverse impacts on or off site and such fill shall not be detrimental to productive farm land, and is otherwise in conformance with the County's Flood Damage Prevention Regulations.
- **Policy S-P33: Hazardous Waste.** Eliminate the use of toxic materials within Humboldt County, where feasible, and require the reduction, recycling, and reuse of such materials, to the greatest extent possible, where complete elimination of their use is not feasible. Require new development which may generate significant quantities of hazardous wastes to be consistent with all the goals and policies of the Hazardous Waste Management Plan (Appendix H).
- **Policy S-P35. Hazard Mitigation Plan.** The County incorporates by reference into this Safety Element the Humboldt Operational Area Hazard Mitigation Plan for unincorporated areas (Volume I and the Humboldt County Annex and the Appendices of Volume II) as adopted and amended by the Board of Supervisors, in accordance with the Federal Disaster Mitigation Act of 2000 and California Government Code, Section 65302.6.

Humboldt County Emergency Operations Plan

The County's EOP addresses the planned response to emergency situations, which could include natural disasters, technological incidents, and human-caused disasters that could affect the County (Humboldt County 2015). This plan establishes a framework for emergency management organization; identifies policies, responsibilities, and procedures required to protect the health and safety of the County; and establishes operational concepts and procedures associated with field response to emergencies.

Humboldt Operational Area Hazard Mitigation Plan

The Humboldt Operational Area HMP is a plan to address multiple hazards faced by County communities. The Humboldt HMP was approved by FEMA on January 28, 2008. The HMP inventoried potential natural hazards that the defined planning area is most vulnerable to; assessed the risk to the planning area's citizens, buildings, and critical facilities; and developed a mitigation strategy to reduce the risk of exposure and facilitate a swift and organized recovery should a disaster occur (Humboldt County 2014).



3.9.3 Methodology for Analysis

The applicable hazards and hazardous materials regulations were reviewed and the applicable hazardous material database searches conducted in order to complete the analysis portion of this section. These regulations and databases were analyzed in conjunction with the thresholds of significance identified below.

3.9.4 Thresholds of Significance

The CEQA Guidelines' Appendix G Environmental Checklist was assessed during the NOP scoping process to identify the proposed project components that have the potential to cause a significant impact. The following thresholds of significance were used to determine if further evaluation in an EIR was warranted to ascertain whether the proposed project may:

- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- 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.
- 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 or private airport or public use airport, would the project result in safety hazard or excessive noise for people residing or working in the project area. (Refer to Section 7, Effects Found Not To Be Significant.)
- Impair implementation of, or physically interfere with an adopted emergency response plan, or emergency evacuation plan.

Additionally, the following threshold is discussed in Section 3.16, Wildfires:

- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

3.9.5 Project Impact Analysis and Mitigation Measures

This section analyzes the proposed project's potential to result in significant impacts to hazards and hazardous materials. When a potential impact was determined to be potentially significant, feasible mitigation measures were identified to reduce or avoid that impact.



Routine Transport, Use, or Disposal

Impact HAZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact Analysis

Construction

Temporary construction activities associated with implementation of the proposed project would involve the transport and use of gasoline, diesel fuel, hydraulic fuel, solvents, and oils typically associated with operation of construction equipment and vehicles. These chemicals would be used and stored on construction sites within the proposed project area during construction, as well as transported along public roadways throughout the proposed project area. The use of generators for construction or operation of equipment, such as pumps, may also be required under the proposed project. Federal, state, and local laws governing the handling, storage, and transport of these and other hazardous materials and spill clean ups are discussed in the Regulatory Setting of this section and would be required for the storage and transport of hazardous materials associated with implementation of the proposed project. These regulations are established to prevent the improper use of materials and to reduce the risk of exposure to the public. Impacts associated with routine release of hazardous materials during transport, use of, or disposal could potentially result in a significant impact to the public or the environment; however, the County and chosen contractor would be required to comply with all relevant and applicable federal, state, and local laws and regulations governing transport, storage, use, and disposal of hazardous materials during construction and implementation of the proposed project. Therefore, compliance with these regulations would ensure that the potential for impacts related to hazardous materials transport, use, and disposal would be less than significant.

Operation

Operational impacts associated with the proposed project would be limited to hazardous materials typically generated by residential and commercial land uses, which would likely include cleaning materials, such as solvents. These substances would not be used in substantial quantities and would not create a significant hazard to the public or the environment. Additionally, general landscaping and maintenance would likely include the use of pest control and herbicides, which would not be used in substantial quantities. No operational impacts relative to hazards or hazardous materials would occur from operation of the water storage tank. Therefore, operational impacts would be limited in nature and would result in a less than significant hazard impact to the public and the environment.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

None required.

Level of Significance After Mitigation

Less Than Significant Impact.



Release from Foreseeable Upset and Accident Conditions

Impact HAZ-2: The proposed project would not 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.

Impact Analysis
Construction

The potential for release of hazardous materials into the environment could result from discovery of hazardous materials in the soils excavated during construction or from spills related to construction equipment and activities. The use of heavy construction equipment requires the use of small amounts of hazardous materials, such as oils, fuels, and other potentially flammable substances that have the potential to be released into the environment if not handled properly. The amount of these materials needed for equipment maintenance would not be enough to cause a significant hazard to the public if released, since the quantity of these hazardous materials on-site at any given time would only amount to a refueling truck and the construction equipment. The proposed project would be required to comply with applicable federal, state, and local laws pertaining to the safe handling and storage of hazardous materials. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, MM HYD-1 requires the project Applicant to implement a SWPPP during construction activities to prevent contaminated runoff from leaving the project site. Therefore, no significant impacts would occur during construction activities.

Additionally, as discussed in the introduction of this section above, common hazardous materials such as asbestos, lead, PCBs, and radon are not anticipated to be encountered in the project area, since the region is not a known location for NOA, and no demolition of pipes or other older structures is anticipated for the proposed project. Therefore, potential impacts related to these hazards would be less than significant.

Operation

Similar to Impact HAZ-1, operational impacts would be limited to hazardous materials typically generated by residential and commercial land uses, which would likely include cleaning materials such as solvents. These substances would not be used in substantial quantities and would not create a significant hazard to the public or the environment. Additionally, general landscaping and maintenance would likely include the use of pest control and herbicides, which would not be used in substantial quantities. The water storage tank would not generate any hazardous waste. Therefore, operational impacts would be limited in nature and would result in a less than significant hazard impact to the public and the environment.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM HYD-1 would be required.

Level of Significance After Mitigation

Less Than Significant Impact with Mitigation Incorporated.



Existing or Proposed Schools

Impact HAZ-3: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Impact Analysis

Construction

Construction of the proposed project has the potential to result in emissions of toxic contaminants in the form of DPM emissions from the operation of diesel fueled internal combustion engines. Additionally, other potentially hazardous materials present within soils could be disturbed during construction activities and could become airborne and adversely affect nearby schools. As shown in Table 3.9-1 above, there are three schools within 0.25 mile of the proposed project; therefore, potentially hazardous materials and emissions could be emitted near existing and proposed schools in the region. However, as discussed in Section 3.3, Air Quality, compliance with the North Coast Unified Air Quality Management District Rule104 would be required in order to reduce fugitive dust emissions, and thus reduce the potential for hazardous airborne particles to be released. Therefore, construction impacts would be less than significant.

Operation

Operation of the proposed project would involve limited use of hazardous materials (i.e., cleaning materials and herbicides, as discussed above). These substances would not be used in substantial quantities and would not create a significant hazard to the public or the environment. In addition, project operation would have limited potential to emit hazardous materials, since operation emissions would be limited to small quantities of DPM from vehicles traveling to and from the residences. Thus, project operation would have a less than significant impact on schools within 0.25 mile.

Given the above, the potential for the implementation of the proposed project to generate hazardous emissions within 0.25 mile of a school during both construction and operation would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

None required.

Level of Significance After Mitigation

Less Than Significant Impact.



Hazardous Materials Sites

Impact HAZ-4: The proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

Impact Analysis

The project site is not located on the Cortese list database as a potential hazard site. As shown on Table 3.9-2 above, there are six sites within 0.5 mile of the project site that are listed on the Cortese list database (DTSC 2019; SWRCB 2019). However, as shown on Table 3.9-2, all except one of these potentially hazardous sites have a listing status as completed or case closed, meaning no further remediation actions are required at these sites and do not pose any risk or hazard to the public or environment. There is one site, the Redwood Acres, which is listed as a voluntary cleanup site (DTSC 2019). According to the cleanup records for this site, an underground storage tank containing gasoline has leaked into the surrounding soil and groundwater within the parking area of this site. Although no known human receptors were identified within the area, ongoing monitoring and remediation has occurred at this site, and final investigations for soil and groundwater will occur through the end of 2020 (DTSC 2019). Due to the limited nature of this hazardous site, as well as distance from the project site (0.5 mile northeast of project site), it is not anticipated that this site would affect the project site or create a significant hazard to future residents associated with the project. Additionally, there are no hazardous sites near the proposed water storage tank location. Therefore, the proposed project does not have the potential to create significant hazard to the public as a result of the listing. As such, there would be a less than significant impact.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

None required.

Level of Significance After Mitigation

Less Than Significant Impact.

Emergency Response Plan or Emergency Evacuation Plan

Impact HAZ-5: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact Analysis

The proposed project includes two main access points: one from Redwood Street and another from Arbutus Street. Additional internal access roads would be constructed as part of the proposed project, which would branch off from Redwood Street and Arbutus Street. These access streets would connect to the larger roadway network in the region that provides regional access via U.S. Highway 101 (approximately 2.7 miles west of the project site), which runs in a north-south direction through the County.



The County's EOP outlines procedures to follow in the event of an emergency, such as a flood or fire, that may affect the County. Although the County's EOP does not outline specific emergency evacuation plans or routes for the area, it is likely that in the event of an emergency, residents in the project area would utilize the two access points and would funnel into the large roadway network within the region and would not interfere with the County's EOP. Therefore, operational impacts associated with the proposed project would result in a less than significant impact related to the County's EOP.

During construction, it is not anticipated that construction-related traffic would substantially affect emergency operations or evacuation plans, should an emergency event occur during the 20-year construction period for the proposed project. However, because of the anticipated length of construction of the proposed project, construction activities could interfere with emergency plans or evacuations, should such an event occur. As such, MM TRANS-1, Traffic Management Plan, would be required throughout project construction in order to limit any potential impacts from construction equipment entering and exiting the surrounding roadways, and would ensure that emergency access remains possible at all times. Therefore, through implementation of MM TRANS-1, construction of the proposed project would not interfere with the County's EOP and would therefore have a less than significant impact with mitigation incorporated.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM TRANS-1 would be required.

Level of Significance After Mitigation

Less Than Significant Impact with Mitigation Incorporated.



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