4.7 Hazards and Hazardous Materials

This section evaluates potential environmental impacts related to hazards and hazardous materials during construction and operation of the project. In addition to the analysis provided in this section, the following subjects are related to hazards and hazardous materials, but are evaluated in other sections of this EIR:

- Potential impacts to sensitive receptors from vehicle emissions are evaluated in Section 4.2 (Air Quality)
- Potential impacts to emergency access are evaluated in Section 4.13 (Transportation)

4.7.1 Setting

Hazardous materials are a wide-ranging category of substances that include toxic substances, flammable or explosive materials, corrosive substances such as acids, and radioactive substances. A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. Facts that influence the health effects of exposure to hazardous material include the dose to which the person is exposed, the frequency of the exposure, the exposure pathway, and individual susceptibility.

The California Code of Regulations (CCR) defines a hazardous material as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either: (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed (CCR, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10). Hazardous wastes refer to hazardous materials that are no longer used and have been disposed of or are awaiting disposal.

Emergencies involving hazardous materials often occur due to mechanical failure or human error. These types of emergencies also sometimes occur as a secondary impact of another emergency, such as an earthquake or flood. Hazardous material releases can occur from buildings such as factories and processing facilities, as well as from vehicles that transport chemicals or other hazardous substances. Road vehicles, trains, and (more rarely) aircraft can all suffer accidents that cause a release of hazardous materials.

Hazardous Materials Corridor Study

A Hazardous Materials Corridor Study, included as Appendix G, was prepared for the project site (SHN 2018). A hazardous materials corridor study was completed in general conformance with the ASTM-International (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E1527-13. Interviews were not conducted with current or past property owners, tenants, or occupants of the properties located within the project alignment; a deviation from the ASTM standard.

The corridor study included reviewing government records for properties within one-eighth (1/8) of a mile (660 feet) of the project alignment boundaries that may have potential for environmental concern during construction. The basis for the records review was a government database search conducted by Environmental Data Resources Inc. (EDR).

The EDR report identified sites that government regulatory agencies have reported as having environmental concerns, such as, releases of contaminants to the soil and/or groundwater, underground storage tanks (USTs), or use of hazardous materials. SHN further researched listed sites that have the potential to affect the project by reviewing available records on the CalEPA Cortese List (including the SWRCB Geotracker website) and interviews of HCDEH staff (SHN 2018).

During the course of the corridor study, SHN conducted a field reconnaissance within the project alignment and private properties where access was granted to determine if potential sites of concern existed which were not listed in the EDR report. The project alignment reconnaissance was also performed to verify the locations of listed sites. Aerial photographs from 1941 to 2016 were provided by EDR and reviewed during the completion of this corridor study.

Based on the data available, each of the sites that could potentially impact the project has been assigned a hazard rank; hazard ranks are defined as follows:

Hazard Rank 1: A site that will likely affect project construction. Contamination of soil and/or groundwater is confirmed to be within the project alignment.

Hazard Rank 2: A site with the potential to affect the project, either because of the presence of contamination that may likely migrate into the project area or because the extent of contamination is unknown.

Hazard Rank 3: A site that is not known to be contaminated, but due to current or historical use could possibly have contamination that could affect project construction.

Hazard Rank 4: A site that has little or no potential to affect the project.

The corridor study identified seven sites within, or adjacent to, the project site that have the potential to have contaminants of concern (COCs) which may affect project construction. Three of the seven were listed on the State Water Resources Control Board (SWRCB) Geotracker website. Review of the publically available information for the three Geotracker listed properties document soil and groundwater impacts from historical activities (mill operations, industrial land uses, and areas of fill materials of unknown origins) and petroleum hydrocarbon releases from leaking USTs. Of the three Geotracker listed sites, two were found to be open cases under remediation, both of which are adjacent to the project site along Vance Avenue and Bendixsen Street. The third site (Fairhaven Fire Protection District), adjacent to the project site, has received regulatory closure. Although the Fairhaven Fire Protection District site is considered closed, the possibility exists that COCs previously identified at this site may extend past the property boundary.

Four of the seven properties were not identified on the Cortese List; the Samoa Pacific Group property, the area formerly occupied by the Hammond Lumber Railroad, the Eureka Municipal Airport, and New Navy Base Road. However, due to historical land uses, there is the potential for soil and groundwater on these properties or roadway to be impacted by pentachlorophenol (PCP), semi-volatile organic compounds (SVOCs), dioxins/furans, polychlorinated biphenyls (PCBs), petroleum hydrocarbons, metals, and aerially deposited lead (ADL) which may have the potential to affect project construction.

The location of all seven properties are identified in Appendix G, Hazardous Materials Corridor Study, of this EIR. Table 4.7-1, below, describes a brief site history and COCs for each of the seven properties.

Table 4.7-1 Overview of Contamination History

Site Name	Contaminants of Concern	Details of Contamination, Media, Extent, Concentrations, etc.	Groundwater Depth/ Direction	Hazard Rank
Samoa Pacific Group (within Project site)	Petroleum hydrocarbons, metals, dioxins/furans, and SVOCs	Historical aerial photographs of property show numerous log decks present in northern portion of the Approved Samoa WWTF site. Pentachlorophenol (PCP) and dioxins/furans were detected in soil and groundwater samples collected from the adjacent mill property, currently the location of the Redwood Marine Terminal II (RMT-II). Given that COCs were identified in soil and groundwater at the adjacent mill property, there is potential that lumber stored on northern portion of Approved Samoa WWTF was treated. Therefore, there is potential for PCP in soil and groundwater to be present in northern portion of Approved Samoa WWTF location.	Unknown	3
Humboldt Bay Harbor Recreation and Conservation District Redwood Marine Terminal II (adjacent to Project site along Vance)	Dioxins and furans, metals, pH, chlorinated solvents	Corridor area extends into former Evergreen Pulp Incorporated pulp mill (Case No. 1NHU892), which is an open case with North Coast Regional Water Quality Control Board (NCRWQCB), and former LP Samoa Solid Waste Disposal Site (Facility ID # 1B73061OHUM). In corridor area, there is a potential to encounter low concentrations of dioxins/furans, metals, and spent pulping liquors in soil and groundwater, and potential landfill waste in soil.	Approximately less than 1 foot below ground surface (bgs) in winter (highest recorded) in an east-southeasterly direction.	1
Former Hammond Lumber Railroad (within Project site)	Petroleum hydrocarbons, metals, pesticides, herbicides, and SVOCs	Railroad rights-of-ways have typically been found to contain heavy metals, petroleum hydrocarbons, creosote, chlorinated compounds, pesticides and polychlorinated biphenyls (PCBs) in soil and/or groundwater. There is potential for soil and groundwater impacts in vicinity, and downgradient of former Hammond Lumber Railroad corridor which is included in project site.	Unknown	3
Fairhaven Business Park (adjacent to Project site along Bendixsen)	Diesel, petroleum hydrocarbons, BTEX, and SVOCs	LUST case recently opened. 10,000-gallon UST removed in April 2011. Laboratory analysis of soil and groundwater samples collected during UST excavation detected impacts to soil and groundwater. Initial subsurface investigation has not been completed. NCRWQCB approved workplan in April 2012.	Unknown-approximately to south based on topography	2

Site Name	Contaminants of Concern	Details of Contamination, Media, Extent, Concentrations, etc.	Groundwater Depth/ Direction	Hazard Rank
Fairhaven Fire Protection District (adjacent to Project site along Bendixsen)	Petroleum hydrocarbons	LUST case closed as of 8/15/2005. A Soil Management Plan is in place to manage residual soil and groundwater impacts. Based on information available in HCDEH file, soil and groundwater impacts do not appear to extend into the roadway right-of-way.	3.35 to 7.93 feet bgs in a southeasterly direction	2
Eureka Municipal Airport (within Project site)	Petroleum hydrocarbons and aerially deposited lead	Eureka Municipal Airport was constructed in the mid-1950s, Older airports have typically been found to contain heavy metals and petroleum hydrocarbons in soil and/or groundwater due to aerially deposited lead (ADL) and fuel storage. As such, there is potential for soil and groundwater impacts in the vicinity, and downgradient of Eureka Municipal Airport.	Unknown	3
New Navy Base Road (within Project site)	Aerially deposited lead	Project alignment is located within and immediately adjacent to New Navy Base Road which currently and historically has been used for vehicular traffic since its development in the late 1950s/early 1960s. Historically, elevated concentrations of lead have been documented adjacent to roadways with high traffic vehicular use. Due to the proximity of the project area to New Navy Base Road, ADL may have impacted soils in immediate vicinity of roadway.	Unknown	3

Wildfire Hazards

The State of California Department of Forestry and Fire Protection (CALFIRE) has been assessing the risk of wildfire in the State for decades. As a part of their assessment, CALFIRE's Fire and Resource Assessment Program (FRAP) was developed to assess potential wildfire hazards on a landscape level which can aid land management planners in determining appropriate strategies for fuels reduction and aid county and local officials in determining appropriate mitigation strategies for communities.

The FRAP mapping process has been incorporated into the Humboldt County General Plan (Humboldt County 2017), which shows that the western portion of the county, along the Pacific Coast in general, as having a mosaic of Fire Hazard Severity Zones (FHSZ) ranging from "Unzoned" to "Moderate" and "High" (CALFIRE 2017). For the Samoa Peninsula, the FHSZ are predominantly Moderate, with areas of High FHSZ clustered around concentrations of residential development. Portions of the peninsula that are near the coast and bay shorelines are designated as Unzoned.

The proposed project area is served by a variety of wildland and urban fire agencies including CALFIRE, Humboldt Bay Fire and the Samoa Peninsula Fire District, as well as other local area fire departments under mutual-aid services. The Samoa Peninsula Fire District is a volunteer fire service that has a station located in community of Fairhaven.

Airport Operations

Murray Field Airport is located approximately 3.8 miles east of the project site, and provides general aviation services. Murray Field Airport is an attended aviation operation and provides day and night operations with a lighted field.

Samoa Field Airport is located adjacent to the southern end of the proposed project (within approximately 0.5 mile). Formerly known as the Eureka Municipal Airport, Samoa Field Airport is a City of Eureka owned airport that is unattended, and provides day time use only but is closed at night.

Evacuation Routes

The Humboldt County Emergency Operations Plan does not list specific emergency response or evacuation routes (Humboldt County 2015).

4.7.2 Regulatory Framework

Federal

The primary federal agencies with responsibility for hazardous materials management include the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Federal laws, regulations, and responsible agencies relevant to the project are summarized in Table 4.7-2.

Table 4.7-2 Federal Laws and Regulations Related to Hazardous Materials Management

Classification	Law or Responsible Federal Agency	Description
Hazardous Materials Management and Soil and Groundwater Contamination	Community Right-to-Know Act of 1986 (also known as Title III of the Superfund Amendments and Reauthorization Act [SARA])	Imposes requirements to ensure that hazardous materials are properly handled, used, stored, and disposed of and to prevent or mitigate injury to human health or the environment in the event that such materials are accidentally released.
	California Environmental Protection Agency (CalEPA)	Oversees a program for hazardous materials and waste to ensure consistency throughout the State in regard to administrative requirements, permits, inspections, and enforcement. CalEPA certifies local government agencies known as Certified Unified Program Agencies (CUPA) to implement the hazardous waste and materials standards.
	Comprehensive Environmental Response, Compensation and Liability Act of 1980 (amended by SARA 1986 and Brownfields Amendments 2002)	Regulates the cleanup of sites contaminated by releases of hazardous substances.

Classification	Law or Responsible Federal Agency	Description
Hazardous Materials Transportation and Handling	U.S. Department of Transportation (DOT)	Has the regulatory responsibility for the safe transportation of hazardous materials. The DOT regulations govern all means of transportation except packages shipped by mail (49 Code of Federal Regulations [CFR]).
Petroleum Products	40 CFR Part 112	Spill Prevention Control and Countermeasures (SPCC) plan requirements for aggregate storage of 1,320 gallons or greater of petroleum products.
Occupational Safety	Occupational Safety and Health Act of 1970	Fed/OSHA sets standards for safe workplaces and work practices, including the reporting of accidents and occupational injuries (29 CFR).
Structural and Building Components (Lead-based paint, polychlorinated biphenyls [PCBs], and asbestos)	Toxic Substances Control Act (TSCA)	Regulates the use and management of PCBs in electrical equipment, and sets forth detailed safeguards to be followed during the disposal of such items.
	EPA	The EPA monitors and regulates hazardous materials used in structural and building components and effects on human health.
Hazard Mitigation Planning	Stafford Act and Disaster Mitigation Act	Requires state, local, and tribal governments to develop and submit to the Federal Emergency Management Agency a mitigation plan that outlines processes for identifying natural hazards, risks, and vulnerabilities of the jurisdiction.

State, Regional, and Local

The primary state agencies with responsibility for hazardous materials management include the State Water Resources Control Board (SWRCB) and its regional entities, the Regional Water Quality Control Boards (RWQCBs), the Humboldt County Division of Environmental Health (HCDEH), the California Department of Toxic Substances Control (DTSC), and the California Division of Occupational Safety and Health (Cal/OSHA).

California Public Utilities Code

California's Public Utilities Code requires that each county with an airport that is operated for the benefit of the general public establish an Airport Land Use Commission (ALUC). Among its duties, the ALUC is responsible for ensuring the safe operation of new and existing airports within its jurisdiction. The ALUC prepares an airport land use plan to address safety and other planning issues (for example, noise, land use compatibility) associated with airports in the county. From a safety perspective, the plan establishes safety compatibility standards and sets limitations on building heights and other factors that may interfere with the safe operation of the airport or that may otherwise present an aviation hazard for the public.

Soil and Groundwater Contamination

The cleanup of sites contaminated by releases of hazardous substances is regulated primarily by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), which was amended by the Superfund Amendment and Reauthorization Act of 1986 (SARA), the Brownfields Amendments (2002) and by similar state laws. Under CERCLA, the EPA has authority to seek the parties responsible for releasing hazardous substances and to ensure their cooperation in site remediation.

The State's Hazardous Waste and Substances Sites List (Cortese List, Government Code §65962.5) identifies sites with leaking underground fuel tanks, hazardous waste facilities subject to corrective actions, solid waste disposal facilities from which there is a known migration of hazardous waste, and other sites where environmental releases have occurred. Before a local agency accepts an application as complete for any development project, the applicant must certify whether or not the project site is on the Cortese List. Databases that provide information regarding the facilities or sites identified as meeting Cortese List requirements are managed by the DTSC and SWRCB. At sites where contamination is suspected or known to have occurred, the site owner is required to perform a site investigation and conduct site remediation, if necessary. There are two cleanup standards: one for residential and the other for commercial/industrial land uses. Standards are set for soil, groundwater, soil gas, and vapor intrusion of contaminants into buildings.

Hazardous Materials and Waste

The California Environmental Protection Agency (CalEPA) oversees a Unified Program for hazardous materials and waste to ensure consistency throughout the State in regard to administrative requirements, permits, inspections, and enforcement. CalEPA certifies local government agencies known as Certified Unified Program Agencies (CUPA) to implement the hazardous waste and materials standards. The Humboldt County Division of Environmental Health (HCDEH) is the local CUPA agency for the area of the proposed product. Dependent on the amounts and materials proposed for use at the Approved Samoa WWTF, the HCDEH may require a Hazardous Materials Business Plan for the facility.

Hazardous Materials Transportation

The State of California has adopted DOT regulations for the intrastate movement of hazardous materials. State regulations are contained in Title 26 of the CCR. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state (26 CCR); furthermore, both regulatory programs apply in California. The two state agencies that have primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans).

Petroleum Products

Aggregate storage of 1,320 gallons or more of petroleum products require compliance with the Spill Prevention Control and Countermeasures (SPCC) plan established in 40 CFR Part 112. SPCC Plan compliance is administered by the HCDEH CUPA.

Occupational Safety

Worker health and safety in California is regulated by Cal/OSHA. California standards for workers dealing with hazardous materials (including hazardous wastes) are contained in CCR Title 8. The DTSC and the State Department of Occupational Health and Safety are the agencies that are responsible for overseeing that appropriate measures are taken to protect workers from exposure to potential groundwater contaminants. At sites known or suspected to have soil or groundwater contamination, a site health and safety plan must be prepared. The health and safety plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

Emergency Management

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local government, and private agencies. Responding to hazardous materials incidents is a part of this plan. The plan is administered by the State Office of Emergency Services (OES), which coordinates the responses of other agencies such as local fire and police agencies, emergency medical providers, CHP, the California Department of Fish and Wildlife, and Caltrans.

Locally, Humboldt County has established the Humboldt Operational Area which identifies the Sheriff as Director of Emergency Services for the county. When needed, the OES supports the Sheriff in the organization, coordination and implementation of emergency services in the county. Emergency response needs in Humboldt County are varied, and can be required for earthquakes, flooding, and wildfires. The OES is responsible for maintaining the Humboldt County Emergency Operations Plan (EOP), which provides a framework for the Humboldt Operational Area agencies to respond to any emergency requiring multiagency participation and/or activation of the County Emergency Operations Center (Humboldt Count 2015). The 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 Federal Emergency Management Agency (FEMA) local Multi-Hazard Mitigation Plan (HMP) program, the seismic retrofit program for state bridges and overpasses, tsunami response planning, and the application of the CAL FIRE State Responsibility Area standards for emergency access. All hazard-specific and topic-specific contingency plans complement and build on the EOP.

The Humboldt Operational Area Hazard Mitigation Plan evaluates risks associated with natural hazards such as earthquake, flood, tsunami, and wildfire; it also provides goals, objectives and actions to reduce impacts from these hazards. In addition, the County Office of Emergency Services has prepared a draft Tsunami Emergency Response Plan that is used to guide emergency operations in the event of a tsunami. This draft plan has been modified several times in the last few years with information and experience gained from large tsunami events in other countries.

Humboldt County Aviation Department

In Humboldt County, the County Aviation Department is responsible for the management of airports for general aviation uses by the public; these include six airports, ranging in size from general

aviation to the California Redwood Coast-Humboldt County Airport that provides general aviation and commercial passenger air service.

4.7.3 Evaluation Criteria and Thresholds of Significance

For the purpose of this EIR, the evaluation criteria summarized below are used to determine if the project would have a significant effect related to hazards. The following questions are from CEQA Guidelines' Appendix G Environmental Checklist Section VIII. Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

   - Non-compliance with State or federal hazardous materials or waste regulations.

b. 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?

   - Potential for improper transport, use, disposal, or accidental release of hazardous materials or wastes due to non-compliance with State or federal hazardous materials or waste regulations.

c. Emit hazardous emissions or handle hazardous substances or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

   - Use, storage, or emission of acutely hazardous materials or waste within 0.25 mile of a school.

d. Be located on a site which is included on a list of hazardous materials site compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

   - Location of project on or adjacent to a site with presence or likely presence of hazardous substances or petroleum products.

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 a public use airport, would the project result in a safety hazard for people residing or working in the project area?

   - Location of project within an airport land use plan or within two miles of an airport and introduction of new or increased safety hazard.

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

   - Location of project within two miles of a private airport and introduction of new or increased safety hazard.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

- Location of project in areas that impair or interfere with adopted plan, including emergency access routes.

h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

- Location of project where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

4.7.4 Impact Analysis

Impact HAZ-1: Would the project create a significant hazard through the routine transport, use or disposal of hazardous materials, substances or waste or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials?

This impact analysis addresses CEQA Guidelines Appendix G checklist item VIII.a) and VIII.b) identified in Section 4.7.3.

Small amounts of hazardous materials would be used during the life of the Project and include 1) fuel and petroleum lubricants (gasoline, diesel, oils, grease) for construction and operations equipment uses, and 2) registered chemicals for use in the wastewater treatment plant operations. All hazardous materials are transported by approved haulers, or in original containers, that are approved for the storage and transport of the chemical. The HCDEH may require a Hazardous Materials Business Plan (HMBP) for the facility. The HMBP would document inventory of chemicals used at the WWTF and provide information on product locations, facility operations, and emergency response.

Petroleum Products

Future operations of the proposed improvements to the Approved Samoa WWTF would include the use of petroleum products for equipment fueling and maintenance and cleaning products. These petroleum products are used for onsite equipment and machinery. Fuel shall be brought to the site by a licensed fuel vendor in an approved fuel supply vehicle during construction activities and WWTF operation. The use and storage of these small quantities of fuels is not regulated by the EPA, or through corresponding county regulations as the proposed quantities are less than aggregate levels that would require compliance with the Spill Prevention Control and Countermeasures (SPCC) plan requirements of 40 CFR Part 112. Continued use of these materials at the site with the implementation of the proposed project is not anticipated to result in a significant release of hazardous materials to the environment.

Use of heavy equipment during construction (grading, building construction) would temporarily increase the use of fuels at the site and has the potential to accidentally release hazardous substances to the ground, such as fuel spillage or oil line breaks. Construction operations would fuel vehicles offsite, or would

be fueled onsite by mobile fuel vehicles that would then leave the site. No additional fuel storage is anticipated at the construction sites.

Accidental releases during construction are considered to have a low risk because they are of small volumes and low concentrations. The project contractor would be required to prepare a SPCC Plan for the construction activities and utilize standard construction controls and procedures to avoid and minimize the accidental releases of these hazardous substances. Activities shall include providing a spill control/containment kit onsite during construction operations. Standard construction practices would provide appropriate containment, cleanup, and/or remediation of accidental releases; this includes contacting local, state and federal agencies as is pertinent to the level of any spill and severity. The impact from use of these hazardous materials in accordance with applicable standards ensures that any exposure of the public to hazardous materials would be **less than significant**.

Chemicals

The proposed improvements to the Approved Samoa WWTF would disinfect effluent with UV lighting; therefore, chemicals for disinfection would not be used. Chemicals proposed for use as part of the proposed improvements to the Approved Samoa WWTF include cleaning products. The chemicals will be included in the required HMBP for the wastewater operations, with oversight from HCDEH. While the proposed project would increase the amount of chemicals used at the Approved WWTF, the use of standard regulatory controls and safety practices would reduce the potential for accidental releases. The potential hazard impact from the transport, use, and storage of hazardous materials would be **less than significant**.

Significance *Less Than Significant*

Mitigation **None Required**

Impact HAZ-2: **Would the project emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

This impact analysis addresses CEQA Guidelines Appendix G checklist item VIII.c) identified in Section 4.7.3.

The proposed project would have no impact to an existing or proposed school. The closest existing school is the Peninsula Union School located approximately 0.75 mile northeast of the northern extent of the proposed project. The proposed project would have **no impact**.

Significance *No Impact*

Mitigation **None Required**

Impact HAZ-3: **Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code**

Section 65965.5 and, as a result, would it create a significant hazard to the public or the environment?

This impact analysis addresses CEQA Guidelines Appendix G checklist item VIII.d) identified in Section 4.7.3.

As noted in the Setting above, no parcels within the project site are included on a list of hazardous materials; however, the corridor study identified three listed sites adjacent to the project site that are under remediation and an additional four sites within the project boundary that could potentially have contaminated soils based on historical use.

Construction

Project construction requires excavating and filling. Soil and groundwater potentially impacted with COCs (petroleum and chlorinated hydrocarbons, SVOCs, pentachlorophenol [PCP], pesticides, herbicides, polychlorinated biphenyls [PCBs], metals, creosote, dioxins, and furans) may be encountered within portions of the project alignment in areas of sites with hazard ranks of one, two, or three. There is the potential for unknown types of fill that may contain buried wood and concrete waste from former lumber mills, petroleum plants, repair shops, foundries, and general industrial facilities.

Areas of the proposed project include a portion of a former lumber mill railroad and New Navy Base Road which has been used for vehicular traffic since the 1970s. Railroad rights-of-way in other areas of California have typically been found to contain heavy metals, petroleum hydrocarbons, creosote, chlorinated compounds, pesticides, and PCBs in soil and/or groundwater. As such, there is the potential for soil and groundwater impacts in the vicinity, and downgradient of former railroad corridor. Historically, elevated concentrations of lead have been documented adjacent to roadways with high traffic volume. Due to the proximity of the project area to New Navy Base Road, aerially deposited lead (ADL) may have impacted soils in the immediate vicinity of the roadway. Given that the project is located within and immediately adjacent to New Navy Base Road, there is the potential for ADL.

As summarized above, the project site is within, or adjacent to, areas of potential contamination that could be encountered during project construction. If contaminants were encountered, and not handled properly, project construction would result in a **significant** impact.

Operation

Long-Term Phase consists of an operational increase at the proposed improvements at the Approved Samoa WWTF associated with sewer service to infill development consistent with HBAP and zoning. Operation of the project would not include any earth-moving or earth-disturbing activity. Therefore, the operation of the project would result in **no impact**.

Significance *Significant*

Mitigation **HAZ-3: Soil and Groundwater Management during Construction**

The PCSD shall prepare a construction Soil and Groundwater Management Plan (SGMP) prior to start of construction activities. The SGMP will include the following components:

1. **Soil Pre-characterization Workplan.** A work plan that identifies potential COCs for laboratory analysis, location, and number of borings necessary for pre-characterization and depths for sample collection. This work will be completed by professional engineer or geologist licensed in the state of California. Pre-characterization soil borings shall be conducted in areas that are within or adjacent to sites with hazard ranks of one, two, or three where soil will be disturbed or groundwater encountered by project construction activities. Surficial and depth-discrete samples shall be collected to the proposed depth of excavation. Fill materials may be encountered within or adjacent to sites with a hazard rank of 3 where historical activities and site reconnaissance suggest that areas within or adjacent to the project alignment were filled. Fill materials may include wood debris from treated lumber.
2. **Health and Safety Plan.** Data generated from the soil pre-characterization will be used to prepare a project-specific construction-period health and safety plan and identify areas where impacted soil and/or groundwater management for worker protection may be necessary.
3. **Field Screening Procedures.** Field screening procedures shall be identified in the SGMP and enacted during construction to identify potentially impacted soil in areas of the project alignment that are within or adjacent to sites with hazard ranks of one, two, or three. If impacted soil or groundwater is encountered during construction activities, follow-up measures (such as, soil and groundwater sample collection, laboratory analysis, stockpiling, impacted soil segregation, and manifested disposal) may be necessary.
4. **Follow-up Measures.** The SGMP will identify follow-up measures to be taken in the event impacted soil or groundwater is encountered during construction activities. The SGMP will identify each potential COC, stop-work actions if encountered, person(s) responsible for initiating follow-up measures, and notification, coordination, removal, and disposal processes (as appropriate). If impacted soil and groundwater is encountered during construction, appropriate measures for worker protection shall be implemented per the Health and Safety Plan.

After Mitigation *Less Than Significant with Mitigation*

Implementation of Mitigation Measure HAZ-3 would identify locations where soil or groundwater contain COCs, reducing the potential release of, or exposure to, COCs during construction. If impacted soil and groundwater is encountered during construction, appropriate measures for worker protection shall be implemented per the Health and Safety Plan. Impacted soils encountered during construction activities shall be characterized and disposed

at a facility licensed to accept the material. Mitigation measure HAZ-3 reduces the project's impact to less than significant.

Impact HAZ-4: **Would the project be 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, and result in a safety hazard for people residing or working in the project area?**

This impact analysis addresses CEQA Guidelines Appendix G checklist item VIII.e) identified in Section 4.7.3.

Project facilities (collection, treatment, and disposal) are located within 0.5 mile of Samoa Field Airport, a City of Eureka owned airport. The Samoa Field Airport is unattended (has no staff), is for day time use only and is closed at night. Aircraft use of this field would be unaffected by the construction or operation of the project, as these activities are not proposed within the airport facilities.

Operations of the proposed improvements at the Approved Samoa WWTF could occasionally expose WWTF staff to potential hazards from errant aircraft that could crash at the WWTF; this hazard is considered less than significant because the facility is not located within an area of heavy air traffic and is not within an airport safety zone (no land use compatibility plan has been prepared for the Samoa Field Airport; Humboldt County 2017) where development impacts could impact air traffic operations. Additionally, the proposed improvements at the Approved Samoa WWTF would not result in significant light, glare or other factors that could affect aviation in the immediate area.

The project impact during operation would be **less than significant** impact.

Significance *Less Than Significant*

Mitigation **None Required**

Impact HAZ-5: **Would the project result in a safety hazard for people residing or working in the project area due to a private airstrip located within two miles of the project site?**

This impact analysis addresses CEQA Guidelines Appendix G checklist item VIII.f) identified in Section 4.7.3.

There are no private airstrips located within two miles of the project site; therefore, there would be **no impact**.

Significance *No Impact*

Mitigation **None Required**

Impact HAZ-6: **Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

This impact analysis addresses CEQA Guidelines Appendix G checklist item VIII.g) identified in Section 4.7.3. The proposed project is completely located

within the designated tsunami evacuation zone, as identified by Humboldt County; however, the development of the project is not expected to impair the implementation of or physically interfere with the designated tsunami evacuation routes on the Samoa Peninsula. While short-term construction traffic may affect small segments of roadways during pipeline (collection and disposal facilities) construction, these areas would be limited in length. As described further in Section 4.13, Transportation and Traffic, development and implementation of a traffic control plan for work that would block the public right-of-way, including plans for re-routing of vehicles, bicycles, and pedestrians, as needed, is required by Humboldt County. The plan would ensure adequate emergency access and keep open adequate evacuation routes.

After construction, roadways would be open and project activities would not inhibit evacuation by Approved Samoa WWTF staff. The project's operation impact on emergency plans would be **less than significant**.

Significance *Less Than Significant*

Mitigation **None Required**

Impact HAZ-7: **Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

This impact analysis addresses CEQA Guidelines Appendix G checklist item VIII.h) identified in Section 4.7.3.

While wildfires can occur in Humboldt County, and the area surrounding the project site is a mixture of Unzoned, Moderate, and High FHSZ, fires within the immediate coastal and dune vegetation types are not a common occurrence along the Pacific coast, and especially in the Samoa Peninsula area. The climate is influenced by the Pacific Ocean and significant amount of both precipitation and summer fog provide generally moist conditions. The project would develop infrastructure improvements in support of the Approved Samoa WWTF, and would not expose people to wildfire risk, or be impacted by wildfires, as project site is generally in developed areas with sparse vegetation and the pipelines would be underground. The impact from exposure of people or structures involving wildland fires would be **less than significant**.

Significance *Less than Significant*

Mitigation **None Required**

4.7.5 Cumulative Impacts

Impact HAZ-C-1: **Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to hazards or hazardous materials?**

As discussed in Section 4.7.5, the project would not result in impacts related to location near a school or location within two miles of a private airstrip.

Therefore, implementation of the project would not contribute to any related cumulative impacts.

Project impacts related to interference with an adopted emergency response plan or emergency evacuation plan; and risks involving wildland fires are location specific and no other cumulative projects listed in Section 4, Table 4-1 (Projects Considered for Cumulative Impacts) would be constructed within or adjacent to the project site at the same time as the project. Therefore, the project would not contribute to a cumulative impact related to emergency response and evacuation and wildland fire exposure.

Similar to the proposed project, the cumulative projects listed in Section 4, Table 4-1, could be located on a site included on a list compiled pursuant to Government Code Section 65965.5 and would include the transport, use, or potential upset, of common hazardous materials inherent to the construction process in general, including petroleum products for construction equipment and vehicles, and paints, asphalt materials, concrete curing compounds, and solvents for construction of site improvements. Each of the cumulative projects would be required to comply with existing and future laws and regulations governing hazardous materials, similar to the proposed project, and described in the regulatory setting section above. Such laws have been written to avoid significant hazards from multiple sources, vehicles, and projects. For these reasons, the potential cumulative impact from the use, transport, and disposal of hazardous materials during construction would be **less than significant**. As a result, there would be no significant cumulative impact associated with being located on a site included on a list compiled pursuant to Government Code Section 65965, or increased hazards relative to hazardous materials to which the proposed project would contribute.

Significance *Less than Cumulatively Considerable (Less than Significant)*

Mitigation **None Required**

4.7.6 References

Association of Environmental Professionals. 2018. *2018 CEQA Statutes and Guidelines*.

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