Section 3.4
Hazards and Hazardous Materials

Section Summary

Section 3.4, *Hazards and Hazardous Materials*, provides the following:

- A description of potential hazardous materials sites within and in the vicinity of the Project site;
- A description of Project site hazardous material history and previous hazardous material investigations;
- A description of local, state, and federal regulations and policies that apply to the Terminal Island Maritime Support Facility (MSF) Project (Proposed Project) and alternatives;
- A discussion on the methodology used to determine whether the Proposed Project or alternatives would result in a significant adverse impact regarding hazards and hazardous materials;
- An impact analysis of the Proposed Project and alternatives; and
- A description of mitigation measures proposed to reduce significant adverse impacts of the Project, including reasonably foreseeable direct, indirect and cumulative impacts relating to hazards and hazardous materials.

Key Points of Section 3.4

The Project site is underlain by existing soil and groundwater contamination due to its history of industrial uses, including use as a Naval Air Base and a petroleum coke storage and transfer facility. Numerous previous site investigations have been conducted on the site for the Los Angeles Harbor Department (LAHD) and former site occupants to characterize the soil and groundwater contamination underlying the Project area (LAHD, 2017). Ground disturbance related to construction of the Proposed Project could potentially expose people and the environment to adverse effects due to exposure to hazardous materials in contaminated soil and groundwater. The handling of hazardous materials could potentially result in exposure of workers and adjacent sensitive receptors to contaminants. Under the No Impact Alternative (Alternative 1), the Project site would remain unused and no ground disturbance would occur and therefore removal, handling, and reuse or disposal of the existing contaminated soil and groundwater would not occur. Under the Reduced Project Alternative (Alternative 2), construction-related ground disturbance would be the same as the Proposed Project, except scaled down due to the reduced footprint and thus would have a similar but reduced potential for adverse effects due to encountering contaminated soil and groundwater.

Construction-Related Impacts

Ground-disturbing activities for the Proposed Project, including trenching and excavation for utilities and structure foundations, and excavation for site regrading would encounter contaminated soil and at depths of 10 feet or greater would likely encounter contaminated groundwater. LAHD would conduct soil vapor,

soil, and groundwater testing prior to Proposed Project construction to characterize the waste for handling and reuse or disposal. As discussed in the Project Description (Section 2.5.2), LAHD ~~would~~ has prepared a Soil Management Plan (SMP) in compliance with applicable regulatory requirements to direct the management of the specific contaminated media that could reasonably be expected to be encountered at the Project site, and implementation of the plan would be a permit condition (see Final EIR Appendix D for the SMP; LAHD, 2026). Contaminated soil and groundwater would be properly handled, stored, transported off-site for disposal, or reused on site, if deemed suitable for industrial land use, and ~~disposed of~~ in compliance with the ~~approved~~ SMP~~,~~ and applicable California law, including handling as hazardous waste for soil meeting California's hazardous waste criteria. Additionally, the Project's construction bid specifications would require the development of a health and safety plan and appropriate disposal of excavated soil with no reuse for residential purposes. Under the No Project Alternative (Alternative 1), the Project site would remain unused, and no ground disturbance would occur, and therefore the existing contamination would not be encountered. Under the Reduced Project Alternative (Alternative 2), construction would also encounter contaminated soil and groundwater but to a lesser extent due to the smaller footprint with a commensurate decrease in ground disturbance.

Operations-Related Impacts

The Project site would be paved as part of Proposed Project construction and stormwater would be diverted to storm drains; therefore, operation of the Proposed Project and Alternatives 1 and 2 would not involve any ground-disturbing impacts or groundwater infiltration and would therefore have no potential to disturb or spread contaminated on-site soil and groundwater. Under the No Project Alternative (Alternative 1), no operational activities at the Project site would occur. Under the Reduced Project Alternative (Alternative 2), operational activities would be identical to the Proposed Project, but with reduced intensity due to the smaller footprint.

3.4.1. Introduction

This section includes a description of the existing baseline environmental setting, including existing hazards and hazardous materials in the Project area, and identifies the reasonably foreseeable and potentially significant adverse environmental effects that could result from implementation of the Proposed Project. The analysis in this section focuses on the potential for the Proposed Project to adversely affect human health and safety and the environment.

3.4.2. Environmental Setting

Hazardous Materials

Hazardous materials are defined by federal and state regulations that aim to protect public health and the environment. A hazardous material is any substance that, because of its quantity, concentration, or physical or chemical properties, may pose a hazard to human health or the environment. The term "hazardous materials" refers to both hazardous substances and hazardous waste. Under federal and state laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse health effects when ingested or absorbed), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes

explosions or generates toxic gases). Hazardous materials are defined in the California Code of Regulations, Title 22, as follows:

> *[a] substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, 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, Section 66260.10).*

Current and Historical Land Use

Current and past land use activities are commonly used as indicators of sites or areas where hazardous material storage and use may have occurred or where potential environmental contamination may exist. For example, many historic and current industrial sites have soil or groundwater contaminated by hazardous substances. Other common hazardous materials sources include leaking underground storage tanks (LUSTs) in commercial and rural areas, contaminated surface runoff from polluted sites, and contaminated groundwater plumes.

The Project site is located on Terminal Island within the Port of Los Angeles (POLA or Port). Project site elevations range from +13 to +17 feet Mean Lower Low Water (MLLW). Based on existing soil boring data (Jacobs, 2025) and prior environmental studies (LAHD, 2017), the groundwater elevation at the Project site is approximately +5 MLLW, which corresponds to a groundwater depth of approximately 8 to 12 feet below ground surface (bgs), with a typical depth of 10 feet bgs. Fluctuations in the level of groundwater may occur due to variations in rainfall, tidal fluctuation, and other factors.

The site is within an industrial environment consisting primarily of a mix of shipping and container storage uses. Properties to the immediate north and east consist of rail lines and roadways, to the south are rail lines, roadway, and a large container storage and shipping yard where containers are stored and transferred to trucks and rail for shipping. To the southwest are rail lines, roadways, the Terminal Island Water Reclamation Plant (a sewage treatment plant), and a petroleum product tank farm. To the west are rail lines, a roadway, truck parking/storage, a fire station (Los Angeles Fire Station 40), a large building that houses the U.S. Customhouse and shipping businesses, and a small building that has housed the offices of several different shipping related businesses.

The Project site is located in an area of Terminal Island that has had multiple land uses (LAHD, 2017), as follows.

- The Project area was designated as Allen Field starting in 1928 and used as a civilian combined land and sea airport, purportedly built by LAHD, and used an oil-surfaced runway, a pier, and a sea plane runway. A Naval Air Reserve Training Facility was also established there in 1927 (Denger, 2015).
- The U.S. Navy leased and acquired approximately 367 acres on Terminal Island in 1935, which included the Project area, for use as a Naval Air Base, named Reeves Field. The Naval Air Base included runways, hangars, numerous support buildings, a seaplane lagoon and ramp, underground storage tanks (USTs), and aviation fuel pipelines (LAHD, 2017). Reeves Field was disestablished in 1947, and the fuel pipelines were deactivated and abandoned in place (LAHD, 2017).

- The U.S. Navy leased of most of the area expired in the 1960s and over a period of time during the 1960s portions of the area were gradually released to LAHD, which used portions of the Project site for an asphalt and concrete crushing facility (LAHD, 2017). During the 1970s, portions of the Project site area were leased to the Los Angeles City Police Department for a training area and to the City of Los Angeles for sewage-sludge drying area.
- Construction activities at the Project site between the late 1970s and early 1990s included:
    - demolition and removal of U.S. Navy Reeves Field and all supporting structures between 1977 and 1980, including its fuel USTs with the exception of an 85-gallon fuel oil tank in the former runway area;
    - addition of fill material and paved automobile storage lots in the northern and central portions of the Project site that stored vehicles until at least 1989; and
    - leasing on the southern portion of the site for petroleum coke storage and transfer and the western portion for container refurbishing.
- During the early to mid-1990s, southern portions of the site were used to store dredged materials and to store imported fill for the Seaside Avenue/Navy Way Grade Separation Project.
- The LAXT Dry Bulk Handling Facility was constructed in the mid-1990s and began operating in 1997. Operations included receiving, storing, blending, conveying and loading ships with various grades of coal and petroleum coke. The coal and petroleum coke were received by rail and truck, ultimately conveyed via an above ground conveyor corridor to ships for transport (LAHD, 2017). The facility was fully demolished by 2010.
- Between 2010 and 2017 most of the Project site was a vacant dirt lot used for dredge or soil storage (Google Earth, 2024; EDR, 2024b). In 2018, the southeast corner of the Project site was paved with the rest remaining a dirt lot. In 2021, portions of the Project site were used for container storage and in 2022 more of the site (approximately half) was paved and also used for container storage. Currently, the site is primarily vacant with the southern half paved and the remainder unpaved.

Hazardous Waste and Substance Sites

Environmental Government Records Search. An environmental records database search was obtained for the Project site and surrounding area from Environmental Data Resources (EDR) and reviewed for sites at and near the Project site with the potential to have resulted in soil or groundwater contamination at the Project site (EDR, 2024a). Environmental databases were searched to a maximum distance of 1 mile from the Project site boundary, with some databases searched to lesser distances consistent with American Society for Testing and Materials (ASTM) standards for environmental site assessments. The EDR database search revealed 185 site listings within 1 mile of the Project site boundary. Many of the EDR site listings include data from more than one environmental database and many of the site listings may also represent the same geographic site with different owners/names.

A review of environmental database listings identified in the EDR database (~~Appendix C~~EDR, 2024a) reveals that most of the listings are for sites that generate, use, store, and/or transport hazardous materials that are not of environmental concern to the Project site due to the lack of several risk factors, including types and volumes of hazardous materials, location of the subject listing site, and lack of violations or known spills or leaks. Most of the listings/sites identified in the EDR database search are separated from the Project site by Harbor water bodies that soil or groundwater contamination could not have crossed and rail and roadway transportation corridors that would impede the lateral spread of soil contamination. Sites with no history of large spills or leaks, numerous violations, or existing contamination separated from the Project site by water bodies or several roads and rail lines were removed as potential significant contaminant sources and are not further discussed. However, several sites that are located at and near to the Project site were identified in the EDR database review that may have resulted in contaminants of concern in the soil or groundwater at the Project site and are summarized below.

- **Naval Air Base, Terminal Island.** One EnviroStor and two Formerly Used Defense Sites (FUDS) listings are identified for this site which is mapped within and covering the Project area. The EnviroStor and the FUDS listings is for the Small Arms Range for the Naval Air Base. This facility was used by the Navy as a fleet air base and included nearly one hundred buildings, including quarters, seaplane hangars, a garage, and a storehouse. Ordnance and explosive materials were stored in four separate buildings or shelters along the seaplane lagoon. This facility included multi-firing point skeet ranges, a machine gun butt, and a pistol range; however, these firing ranges were located north, northwest, and east of the Project site boundaries (USACE, 2007). The 2007 USACE site inspection (SI) report (USACE, 2007) for the former Naval Air Base at Terminal Island to discern the presence or absence of~~for~~ munitions and explosives of concern (MEC)~~, and~~ munitions debris (MD), and munitions constituents (MC). The SI included conducting a qualitative reconnaissance by traversing the site to gather general information about potential surficial presence of MEC, MD and MC. The SI investigation did not identify MEC or MD, and no affected MC media were found to be present onsite. This report concluded that munitions ~~indicates MEC and MD~~ are not likely a concern at the site due to the multiple phases of development that has since occurred ~~at the site~~ (USACE, 2007).

- **Former Long Beach Naval Complex (LBNC).** The Former LBNC is located on Terminal Island. It was comprised of the Long Beach Naval Station (LBNS) and the Long Beach Naval Shipyard (LBNSY), which operationally closed in 1994 and 1997, respectively. The Former LBNSY is approximately 1,200 feet east of the eastern boundary of the Project site. The LBNC operated historically as a U.S. Navy facility that included a shipyard, maintenance, and support operations. The site is a designated FUDS and has undergone environmental investigation and remediation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Naval Base Realignment and Closure (BRAC) programs. Environmental cleanup activities have addressed soil and groundwater contamination related to historical military and industrial uses. CERCLA requires a five-year review for remediated sites with residual contamination levels that are too high to allow unlimited use or unrestricted exposure (i.e., residential use). In December 2024, the Navy completed the fifth five-year review of environmental

cleanup actions at Installation Restoration Sites 1 through 6A and 8 through 14 (DoN, 2024). This review evaluated the implementation and performance of remedies and removal actions to verify that the remedies remain protective of human health and the environment for the current use of the site (DoN, 2024). The results of this fifth-year review indicate that the selected remedies at these sites provide current and future protectiveness of human health and the environment (DoN, 2024). Exposure pathways that could result in unacceptable risks are being addressed through institutional controls, and response complete has been achieved (DoN, 2024). These controls are effectively preventing exposure to site-related contaminants (DoN, 2024).

- **Koch Carbon Inc/Reeves Field Bulk Site –760 Ferry St.** This site address no longer exists but ~~appears to~~ correlates with the Project site and is related to the former carbon bulk storage operation at the project site. The EDR listing for this site only consists of an air emissions listing (CA EMI) and an industrial storm-water permit listing (CA CIWQS). No leaks, spills, or other environmental contamination are noted from these businesses at the Project site in the EDR database.
- **LAXT/Savage Pacific Services/Pacific Crane Maintenance Company – 750 Eldridge St.** This address is for the existing vacant office building on the Project site. The EDR database identified listings include a listing as a hazardous waste storage and disposal site, a small quantity hazardous waste generator, an industrial storage facility, and had several violations for minor oil spills from equipment and vehicles. No known existing contamination from these businesses at the Project site are noted in the EDR database.
- **Container Care/Central Container & Chassis – 600 S Ferry Street.** This address does not exist today but based on the EDR report mapping may correlate to one of the entrance roads to the Project site and thus may represent a former business at the Project site. EDR listings for this site include historical UST listings, a current UST listing with the UST listed as "Inactive", and an inactive hazardous material listing. No known environmental contamination is identified at this site in the EDR database.
- **Southwest Terminal/Torrance Logistics/Mobile Oil – 551 Pilchard St.** This site is located approximately 300 feet southwest from the Project site, south of Ferry Street and consists of a petroleum product above ground storage tank (AST) farm with seven ASTs and associated piping. The site is also listed as having an UST. No known environmental contamination is listed for this site in the EDR database.

Methane Zone. Most of the Project site is located within a City-defined methane zone and methane buffer zone, with the exception of the southwest portion of the site (LADBS, n.d.).

Previous Site Investigations. Multiple environmental investigations have been conducted at the Project site. The most recent environmental investigation was conducted in 2017 by Pacific Edge Engineering, Inc. (Pacific Edge), titled "Environmental Baseline Investigation", and included a review of previous investigations and sampling and testing of soil, soil vapor, and groundwater for contaminants of concern (LAHD, 2017). Contaminants of concern were identified based on the sites' historical use and past

environmental investigations. The LAXT Remote Storage Area occupies the majority of the Project site. Borings were conducted at locations evenly spaced across the LAXT Remote Storage Area, with no new borings in the area assessed in a previous 2016 Pacific Edge study due to no changed conditions (information from the 2016 borings were incorporated into the 2017 findings in LAHD, 2017). Of the borings conducted for this study in the Project area, nine had soil, soil vapor, and grab-groundwater samples collected, 13 borings had both soil and soil vapor samples collected, and the remaining borings had only soil samples collected.

All soil samples were analyzed for the following: total petroleum hydrocarbons (TPH) (C6-C44), Title 22 Metals, volatile organic compounds (VOCs) (including oxygenates), semi-volatile organic compounds (SVOCs) (including polycyclic aromatic hydrocarbons [PAHs]), polychlorinated biphenyls (PCBs), and organochlorine pesticides. In addition, one soil sample from each boring was also analyzed for PAHs using EPA Method 8310 because this test method has a lower detection limit for PAH analytes than the SVOC test method. Soil vapor samples were analyzed immediately by an on-site laboratory for VOCs, oxygenates, and gasoline range organics. The grab-groundwater samples were tested for TPH (C6-C44), Title 22 Metals, VOCs, Organochlorine Pesticides, PCBs, and SVOCs and PAHs (LAHD, 2017).

Pacific Edge compared detected contaminants of concern concentrations to various environmental screening levels (ESLs) to evaluate potential human health risks, to evaluate if disturbed soil could be reused, and to evaluate if potential groundwater dewatering during construction would comply with discharge requirements to a surface water body (ocean via storm drain). As referenced by the Los Angeles RWQCB, San Francisco Bay RWQCB Tier 2 Industrial Environmental Screening levels (February 2016) were used to compare to detected contaminants in soil, soil vapor, and groundwater, USEPA Regional Screening Levels (RSLs) (June 2017) were used for organochlorine pesticide contaminants in soil, California Human Health Screening Levels (CHHSLs) were used for soil vapor screening levels, LAHD Environmental Guidance for Industrial Soil was used for screening contaminants within soil, and Los Angeles RWQCB National Pollutant Discharge Elimination System (NPDES) discharge criteria were used to compare detected contaminants in groundwater to discharge requirements.

Results of the soil testing revealed a few compounds were detected at concentrations in soil that exceed the ESL criteria in some soil samples, including TPH (C6-C44), and SVOC (dimethyl phthalate), a PAH (benzo (a) pyrene), and several organochlorine pesticides; and exceeded the LAHD soil guidance criteria in some samples including for TPH (C6-C44), acetone (a VOC), three PAHs (benzo (a) pyrene, chrysene, and naphthalene), several metals, two PCB analytes, and several organochlorine pesticides. LAHD soil guidance criteria, which are based on regulatory requirements and screening levels from DTSC and the Los Angeles RWQCB (LARWQCB), are used to assess whether soil can be reused or imported to Port sites.

Several VOCs and gasoline range organics were detected at similar concentrations in most of the vapor samples collected at the site; however, all detected VOCs and gasoline range organics concentrations were significantly lower than the ESL and CHHSL values for health risks from vapor intrusion into a building structure.

Most grab-groundwater sample contaminant test results were below ESL and NPDES screening levels; however, TPH (C6-C44), arsenic, copper, and nickel, and a PCB analyte were detected in grab-groundwater samples at levels that exceeded ESL criteria, and

NPDES discharge criteria were exceeded for grab-groundwater samples for TPH (C6-C44) and a PCB analyte.

Chemicals detected during the Pacific Edge 2017 Baseline Investigation can typically be associated with the identified past site uses, and therefore, past site uses are likely sources of the detected contaminants. Soil vapor VOC concentrations detected during the baseline investigation were similar across the site, with no obvious or apparent source area observed; however, VOCs were not detected in soil or grab-groundwater samples. Pacific Edge concluded that the source of the soil vapor VOCs was likely not sampled and that solvents used at the previous airfield, which covered most of the site, may be a possible source (LAHD, 2017).

Based on the 2017 Baseline Investigation, Pacific Edge concluded that generally the potential for a human health risk is low based on the very few compounds detected at concentrations that significantly exceed the conservative screening values used (ESL/RSL/CHHSL), and the minor frequency of these detections (LAHD, 2017). Additionally, it was concluded that possible further contamination may exist at the site due to its size and many past industrial users, and that site redevelopment activities could encounter such contamination.

In 2024, Pacific Edge conducted a preliminary review of the 2017 soil vapor data at the Project site using the HERO Note 3 environmental screening levels (revised May 2022) and the DTSC-approved Attenuation Factor (AF) of 0.03 for future industrial buildings. The CHHSLs used as screening levels for the 2017 Baseline Investigation were phased out in 2018 and replaced by the DTSCs HERO Note 3 environmental screening levels. DTSC's HERO Note 3 provides VOCs in soil vapor screening levels for evaluating the potential risk of vapor intrusion into buildings. Based on this preliminary review of the 2017 data using DTSC's HERO Note 3 criteria (revised May 2022), a potential unacceptable human health risk for occupants of future commercial/industrial buildings may be present at the Project site.

VOCs are organic chemical compounds which have significant vapor pressures and can affect the environment and human health. VOCs are numerous, varied, and ubiquitous. Although VOCs include both man-made and naturally occurring chemical compounds, anthropogenic VOCs are regulated due to their potential health impacts, particularly in indoor environments where concentrations can reach higher levels. VOCs are typically not acutely toxic but can have chronic effects depending on the specific VOC and the level of exposure, such as cancer, respiratory problems, and immune system dysfunction.

Numerous previous investigations for the LAXT Remote Storage Area, which includes the majority of the Project site, as well as areas immediately adjacent to the Project site, were reviewed and summarized by Pacific Edge in its 2017 report. The relevant results and conclusions are summarized below (LAHD, 2017):

- **SCS Engineers, 1991. Phase II Site Investigation.** Soil borings were conducted for the formerly proposed Terminal Way expansion and three groundwater monitoring wells were installed. The investigation revealed groundwater at depths of 5-10 feet bgs and elevated TPH concentrations in soil attributed to petroleum coke, low levels of VOCs in the soil and groundwater.
- **Applied Geosciences, Inc., 1992. Phase I Site Assessment.** This study primarily identified areas of concern outside of and immediately south of the former LAXT Remote Storage Area (outside of the Project site) including USTs, fuel pits,

pipelines, water separators, and storm drains. Additionally, four 55-gallon drums were noted, some of which were located on the former LAXT Remote Storage Area; the drums contained waste oil, hydraulic oil, PCBs, and unknown materials. Applied Geosciences, Inc. indicated that Shaefer-Dixon Associates conducted a further assessment of the drums which indicated there was no evidence to suggest that these drums posed a concern for the former LAXT Remote Storage Area; however, these findings were not summarized in the 2017 Pacific Edge report

- **Chemical Waste Management, 1992. Analytical Report**. Sampling and analysis of liquid and sludge in underground substructures identified by Applied Geosciences, Inc. located just south of the LAXT Remote Storage Area (outside of the Project site) was conducted by Chemical Waste Management. Low concentrations of PCBs, lead, SVOCs, and VOCs were found in solids within storm drains and utility vaults. The storm drains, utility vaults and USTs were subsequently removed. An off-site fuel pit was found to contain petroleum product and was identified as a potential source of contamination to the adjacent soils.

- **Shaefer-Dixon Associates, 1992. Phase I Site Assessment.** The study was conducted for LAHD to identify potential contaminant sources at the LAXT Remote Storage Area. Several potential sources were identified including dredged fill materials, abandoned aviation fuel pipelines and associated water separators, potential soil contamination where former Reeves Field USTs and sump were removed, potential 85-gallon fuel oil tank not removed in former runway area, and remnant hazardous materials from former onsite buildings with hazardous materials use.

- **Geofon, Inc., 1992. Geotechnical Investigation**. Possible contamination was noted in one boring in the northeastern corner of the LAXT Remote Storage Area. The exact location of this boring is unknown but was assumed by Pacific Edge in its 2017 report to be near or at the former Railway Car Dump area located in the northeastern area of the LAXT Remote Storage Area.

- **Geofon, Inc., 1993. Soil and Groundwater Investigation.** This investigation was focused on the former Railway Car Dump area located in the northeastern portion of the LAXT Remote Storage Area. In the soil, TPH was detected at a maximum concentration of 100 mg/kg and trace amounts of VOCs and pesticides were detected. Only mercury and selenium were detected at concentrations slightly above NPDES requirements in the groundwater.

- **Shaefer-Dixon Associates, 1993. Baseline Site Characterization**. This investigation was conducted to determine soil and groundwater baseline conditions in the potential source areas identified by Shaefer-Dixon Associates during their 1992 Phase I assessment for the LAXT Remote Storage Area. The investigation included the collection and analysis of soil samples from new fill (from the mid-1980s) and original hydraulic fill at the former Reeves Field, and the installation and sampling of groundwater monitoring wells. Low levels of total fuel hydrocarbons (TFH) were detected in one sample, and elevated levels of TPH were detected in all samples from the new fill, and elevated levels of both TFH and TPH were identified at the former Container Refurbishing area in the original hydraulic fill. Soil samples from outside the former Container Refurbishing area were generally non-detect for TPH and TFH, with a few samples containing low levels of TPH

and TFH. No significant soil contamination was found at or near former structures associated with Reeves Field. Groundwater was encountered at 2.5 to 5-feet bgs and no obvious plumes of groundwater contamination was identified.

- **Tetra Tech, 1995. Soil Characterization Report.** Tetra Tech sampled stockpiled fill soil that was imported to the former LAXT Remote Storage Area for temporary storage for potential use at the Seaside Grade Separation Project and determined the fill did not contain compounds that would cause regulatory concern and was subsequently deemed adequate as construction fill.
- **Tetra Tech, 1998. Environmental Baseline Study – Surface Soils.** This baseline study was conducted to establish pre-LAXT operation soil conditions. Surficial soil samples were primarily collected at southern and northwestern portion of the former LAXT Remote Storage Area because the northeastern area was paved with concrete. VOCs and PCBs were not detected in any sample, except for one sample with a low VOC reading. Elevated TPH levels in the carbon range typical of asphalt and petroleum oils was detected in all samples. PAHs analytes associated with petroleum coke were detected in almost all samples.
- **The Source Group, Inc., 2005 and 2006. Site Characterization.** This investigation was conducted to evaluate surface and near surface soil at the LAXT Remote Storage Area; during the investigation the LAXT Dry Bulk Handling Facility (coal and petroleum coke) was in operation, which was generally located on the southern portion of the site. Elevated TPH concentrations were detected and PAHs were detected in approximately 15 percent of soil. Carcinogenic PAH concentrations were identified in engineered soil berms and unpaved areas present along the northern and southern boundaries of the coal handling area located within the southwestern portion of the Project site.
- **Locus, 2011. Baseline Environmental Site Characterization.** This study presented results of a soil and groundwater investigation conducted by The Source Group, Inc. in 2010 for the northeastern half of the former LAXT Remote Storage Area after significant quantities of surface material were removed from the site for site restoration and LAXT facility demolition. Elevated TPH concentrations were detected and VOC were only detected in a few soil samples consisting of low levels of naphthalene and toluene. Low concentration of SVOCs (phenol) were detected in two samples. Low levels of DDD, DDE, and DDT (pesticide contaminants) were detected in two soil samples. Elevated levels of TPH were detected in several grab-groundwater.
- **Pacific Edge, 2015. Stockpile Sampling**. Pacific Edge collected samples from an existing soil stockpile located at the central portion of the former LAXT Remote Storage Area and numerous small stockpiles located throughout the area. All detected TPH and metals concentrations were below the maximum concentration allowable for import/fill material, with the exception of one sample from a stockpile with elevated TPH concentration.
- **Pacific Edge, 2016. Limited Soil Screening Study.** This investigation focused on soil presumed to have been used to elevate the area after demolition of the LAXT Remote Storage Area in 2010. All samples were analyzed for TPH with carbon chain differentiation, metals, VOCs, SVOCs, organochlorine pesticides, and PCBs. PCBs, VOCs, and SVOCs were non-detect and metal concentrations

within ambient levels typically found in the Port environment. Elevated TPH levels were detected in all samples and low PAH concentrations were detected in several samples. Low DDE and DDD concentrations were detected in most of the samples.

3.4.3. Applicable Regulations

Several of the laws, policies, and regulations applicable to the Proposed Project and alternatives are designed to regulate hazardous materials and hazardous waste. These regulations also are designed to limit the risk of upset during the use, transport, handling, storage, and disposal of hazardous materials. The Project would be subject to numerous federal, state, and local laws and regulations including those described below.

3.4.3.1. Federal Regulations

Resource Conservation and Recovery Act (RCRA)

The goal of RCRA (42 U.S.C. Section 6901–6987), a federal statute passed in 1976, is the protection of human health and the environment, the reduction of waste, the conservation of energy and natural resources, and the elimination of the generation of hazardous waste as expeditiously as possible. The Hazardous and Solid Waste Amendments of 1984 significantly expanded the scope of RCRA by adding new corrective action requirements, land disposal restrictions, and technical requirements. The corresponding regulations in 40 CFR Sections 260–299 provide the general framework for managing hazardous waste, including requirements for entities that generate, store, transport, treat, and dispose of hazardous waste.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

CERCLA, commonly also known as Superfund, was enacted in 1980 to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA is codified in federal statute at 42 U.S.C. Section 9601 et. seq, and its corresponding regulations are found in 40 C.F.R. Part 307.

Clean Water Act (CWA)

The CWA is the principal federal statute protecting navigable waters and adjoining shorelines from pollution. The law was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. Since its enactment, the CWA has formed the foundation for regulations detailing specific requirements for pollution prevention and response measures. USEPA implements provisions of the CWA through a variety of regulations, including the National Contingency Plan, as described above, and the Oil Pollution and Prevention Regulations. Implementation of the CWA is the responsibility of each state.

Spill Prevention, Control, and Countermeasure (SPCC) Rule

As part of the CWA, the USEPA oversees and enforces the Oil Pollution Prevention regulation contained in Title 40 of the Code of Federal Regulations, Part 112, which is often referred to as the "SPCC rule" because the regulations describe the requirements for facilities to prepare, amend, and implement Spill Prevention, Control, and Countermeasure (SPCC) Plans. A facility is subject to SPCC regulations if a single oil (or gasoline, or diesel fuel) storage tank has a capacity greater than 660 gallons, or the total above ground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the "Navigable Waters" of the United States. The rule specifies that proactive, and not passive, measures be used to respond to oil discharges.

National Pollutant Discharge Elimination System (NPDES)

The NPDES permit program, created in 1972 by the CWA, helps address water pollution by regulating point sources that discharge pollutants to waters of the United States. The permit provides two levels of control: technology-based limits and water quality-based limits (if technology-based limits are not sufficient to provide protection of the water body). Under the CWA, USEPA may authorize state, tribal, and territorial governments to administer the NPDES permit program, enabling them to perform many of the permitting, administrative, and enforcement aspects of the NPDES program. In states authorized to implement CWA programs, USEPA retains oversight responsibilities. Within the state of California, the SWRCB issues both general permits and individual permits under the NPDES permit program.

3.4.3.2. State Regulations

Hazardous Waste Control Law

The Hazardous Waste Control Law, codified in California Health and Safety Code Sections 25100-25259, implements the federal RCRA cradle-to-grave waste management system in California. The California Environmental Protection Agency (Cal EPA) administers the California Hazardous Waste Control Law to regulate hazardous waste. The Hazardous Waste Control Law lists chemicals and common materials that may be hazardous; establishes criteria for identifying, packaging and labeling hazardous waste; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills. DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law. California hazardous waste regulations can be found in Title 22 California Code of Regulations Division 4.5, Environmental Health Standards for the Management of Hazardous Wastes.

California Health and Safety Code Section 25507 requires businesses that handle hazardous materials above certain thresholds to prepare and maintain a Hazardous Materials Business Plan (HMBP), which must include an inventory of materials, an emergency response plan, and employee training. The HMBP is submitted to the local Certified Unified Program Agency (CUPA) and must be updated regularly. The emergency response plan outlines procedures for containing and reporting accidental releases to protect public health, safety, and the environment. Under California Health and Safety

Code Section 25507, an HMBP is generally required if a business handles hazardous materials in quantities equal to or greater than 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases.

California Department of Toxic Substance Control (DTSC)

DTSC is a department of CalEPA and is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code. The hazardous waste regulations overseen by DTSC establish criteria for identifying, packaging, and labeling hazardous waste; prescribe management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous waste that cannot be disposed of in landfills.

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act provides a comprehensive water quality management system for the protection of California waters. The act designates the SWRCB as the ultimate authority over State water rights and water quality policy and established nine regional water quality control boards (RWQCBs) to oversee water quality at the local and regional level. The RWQCBs have the responsibility of granting NPDES permits and setting waste discharge requirements for stormwater runoff from construction sites. The proposed project's NPDES permits in California would be under the jurisdiction of the LARWQCB.

CCR, Title 8 – Occupational Safety

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety and promulgates regulations regarding worker safety related to the handling and use of hazardous materials (8 CCR Sections 5139-5223). Cal/OSHA standards are generally more stringent than federal regulations. Under California Labor Code Sections 6360 et seq., employers are required to inform employees regarding the hazardous substances they may be exposed to at the workplace. The regulations under Sections 6360 et seq. specify requirements for informing employees about hazardous substances in the workplace, maintaining and providing access to Safety Data Sheets (SDS), implementing a written hazard communication program, providing effective employee training, labeling hazardous materials, notifying employees of exposure, supplying appropriate protective equipment, and prohibiting retaliation against workers who seek information or report unsafe conditions.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) address six elements: hazardous waste generators and hazardous waste on-site treatment; underground storage tanks (USTs); aboveground storage tanks; hazardous materials release response plans and inventories; risk management and prevention programs; and Uniform Fire Code hazardous materials management plans and inventories. The Unified Program requires CalEPA to certify local

government agencies, known as CUPAs as able to implement all the required environmental programs and to consolidate, coordinate and make them consistent within their jurisdiction. State partner agencies involved in the implementation of the Unified Program and providing technical assistance to CUPAs include CalEPA, the office of the State Fire Marshal, DTSC, and SWRCB. The CUPA for the Project area is the City of Los Angeles Fire Department (LAFD).

3.4.3.3. Local Regulations

City of Los Angeles General Plan

The City of Los Angeles General Plan Safety Element contains the following policies related to hazards and hazardous materials that are applicable to the Proposed Project (City of Los Angeles, 2021).

Policy 1.1.4. Health/Environmental Protection. Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from release or intrusion resulting from a disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation.

Policy 1.1.5. Risk Reduction. Reduce potential risk hazards due to disaster with a focus on protecting the most vulnerable people, places and systems

Policy 1.1.6. State and Federal Regulations. Assure compliance with applicable State and federal planning and development regulations. Regularly adopt new provisions of the California Building Standards Code, Title 24, and California Fire Code into the Los Angeles Municipal Code to ensure that new development meets or exceeds Statewide minimums. Ensure new development in Very High Fire Hazard Severity Zones adhere to the California Building Code, the California Fire Code, Los Angeles Fire Code and California Public Resources Code. Facilitate compliance with new standards for existing non-conforming structures and evacuation routes

Policy 3.1.2. Health/Safety/Environment. Develop and establish procedures for identification and abatement of physical and health hazards which may result from a disaster. Provisions shall include measures for protecting workers, the public and the environment from contamination or other health and safety hazards associated with the hazard in addition to abatement, repair, and reconstruction programs.

City of Los Angeles Local Hazard Mitigation Plan

The City of Los Angeles completed and adopted the most recent Local Hazard Mitigation Plan in 2024 (City of Los Angeles, 2024). The plan was approved by the Federal Emergency Management Agency and allows for federal grant funding eligibility to mitigate many of the natural hazards identified in the City of Los Angeles. The plan includes hazardous materials risk reduction strategies, focusing on safe storage, transport, potential releases, and coordinated emergency response to protect communities and the environment.

City of Los Angeles Municipal Code

Section 91.71, Methane Mitigation Requirements, of the City of Los Angeles Municipal Code (LAMC) identifies methane mitigation requirements for all projects that fall within

the "methane zone" or "methane buffer zone" (City of Los Angeles, 2025). In accordance with Section 91.7103 – General Methane Mitigation Requirements, all new buildings and paved areas located in a methane zone or methane buffer zone shall comply with the Methane Mitigation Standards established by the Superintendent of Building. LAMC Section 91.7104.1 requires on-site methane testing. The measured concentration and pressure of the methane gas shall be used to determine the site design level requirements per LAMC Section 91.7109.2 Table 71.

As described in LAMC Section 91.7104.2, Table 71 prescribes the minimum methane mitigation requirements, including passive, active, and miscellaneous systems, depending on the concentration and pressure of the methane present at the site. Each component of the passive, active, and miscellaneous systems shall be constructed of an approved material and shall be installed in accordance with the Methane Mitigation Standards.

Per LAMC Section 91.7106, the gas detection and mechanical ventilation systems per Table 71 shall be approved and enforced by the City of Los Angeles Fire Department. The fire department shall enforce the following: (1) maintenance and service procedures for each gas detection and mechanical ventilation system required per Table 71, which shall be performed by the building owner in accordance with the manufacturer's written instructions; (2) annual and maintenance testing in accordance with the Fire Prevention Bureau Requirement No. 71 and Fire Chief's Regulation 4, Section 4J; and (3) testing of the gas and mechanical ventilation systems shall be performed by a person with a valid Certificate of Fitness for Gas Detection Systems as set forth in LAMC Section 57.117.

Los Angeles Port Police Policy Manual

The Los Angeles Port Police Policy Manual Policy 412, Hazardous Material Response, establishes protocols to protect personnel and citizens during a situation involving suspected hazardous materials, such as at the scene of a traffic accident, chemical spill, or fire where the Port Police are notified (Los Angeles Port Police, 2024). This policy outlines steps to consider, notification and reporting requirements, and supervisor responsibilities.

Port of Los Angeles Risk Management Plan

The RMP, an element of the Port Master Plan (PMP), was most recently updated in 2018 (Port of Los Angeles, 2018). The policies of this plan are used in siting and expanding hazardous cargo facilities relative to high density populations and critical impact facilities. The RMP pertains primarily to marine terminals that accept crude oil, petroleum products, and chemicals. South Coast Air Quality Management District (SCAQMD) Rule 1166.

SCAQMD Rule 1166 requires that an approved mitigation plan be obtained from SCAQMD prior to commencing excavation or grading of soil containing VOC material including gasoline, diesel, crude oil, lubricant, waste oil, adhesive, paint, stain, solvent, resin, monomer, and/or any other material containing VOCs. A site-specific plan is required for larger excavations and/or projects involving the handling/transportation of VOC-contaminated soils, such as sites where excavations involve more than 2,000 cubic yards of VOC-contaminated soil. Under Rule 1166, VOC-contaminated soil is a soil which registers a concentration of 50 parts per million (ppm) or greater of VOCs as measured before suppression materials have been applied and at a distance of no more

than three inches from the surface of the excavated soil with an organic vapor analyzer calibrated with hexane.

Water Resources Action Plan (WRAP)

In 2009, LAHD and Port of Long Beach (POLB), in cooperation with USEPA and LARWCQB, developed the WRAP (POLA and POLB, 2009) to implement programs to protect and enhance water and sediments in the harbors. The WRAP has two main objectives: (1) the Ports' need to achieve their broad mission to protect and improve water and sediment quality, and (2) the imminent promulgation by the LARWQCB and the USEPA of TMDLs for harbor waters and the associated CWA permits. The WRAP contains control measures to address four basic types of sources: land-use discharges (i.e., from terminals and other landside uses), on-water discharges (from vessels and in-water structures), sediments, and watershed discharges (i.e., uses outside of the Ports). The control measures consist of both improvements on current control measures such as housekeeping practices, best management practices (BMPs), and permit compliance programs, and the addition of new measures such as the development of standards, guidance materials, and new policies.

3.4.4. Impacts and Mitigation Measures

3.4.4.1. Methodology

The Project site and immediate surrounding area were evaluated for the presence of hazardous materials, that if present in sufficient concentrations in soil or groundwater, could result in environmental impacts to human health or the environment due to implementation of the Proposed Project or its alternatives. Current and past hazardous materials conditions of the Project site and surrounding areas, including an environmental database search (EDR, 2024a) and an environmental baseline investigation (LAHD, 2017) for the Project site that includes data from previous environmental investigations at the Project site, were reviewed to evaluate the potential for hazardous materials contamination of the soil and/or groundwater underlying the Project site.

3.4.4.2. CEQA Baseline

State CEQA Guidelines, Section 15125, subdivision (a), provides that an EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation (NOP) is published (Final EIR Appendix A). Since the NOP was released in December 2023, the LAHD has determined that 2023 is the baseline year for the CEQA analysis. In 2023, the baseline conditions for the Proposed Project includes the existing conditions of the site, which consists of an unoccupied, unused parcel. No construction or operations currently occur. The Proposed Project would represent a new use at the site and include temporary construction activities and generate new chassis and storage container facility activities.

3.4.4.3. Thresholds of Significance

State CEQA Guidelines Appendix G (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387) CEQA Checklist suggests seven criteria for determining the significance of impacts related to hazards and hazardous materials:

Would the Project:

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

(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?

(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 §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?

(g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Notice of Preparation/Initial Study (Final EIR Appendix A) eliminated criteria (a), (b), (c), (e), (f), and (g) from further consideration on the basis that the related impacts would either be less than significant or would not occur. Accordingly, the Proposed Project or alternatives would have a significant impact if it would:

HAZ-1: 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, create a significant hazard to the public or the environment.

3.4.5. Impact Analysis

3.4.5.1. Proposed Project

Impact HAZ-1: Would the Proposed Project 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, create a significant hazard to the public or the environment?

Construction

The Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (i.e., "Cortese List") maintained by the California DTSC (DTSC, 2024).

However, the Project site has a history of unknown soil and groundwater contamination from past uses of the site, including its former use as a petroleum coke storage and transfer location and potentially from its former use as a Naval Air Base. Components of the

Proposed Project where ground disturbance would occur would be susceptible to encountering environmental contamination in the underlying soil and groundwater. Previous site investigations at and adjacent to the Project site indicate elevated levels of TPH, VOCs, SVOCs, PAH, and several pesticides in the soil and TPH, arsenic, copper, nickel, and a PCB in the groundwater that exceeded regulatory screening levels and criteria at the time of testing. VOCs and gasoline range organics were detected in soil vapor samples in the previous site investigations at levels lower than the screening criteria at the time; however, this screening criteria has since been superseded. A preliminary review of the previous soil vapor data using current DTSC VOC soil vapor screening levels indicates that the levels may exceed human health levels for soil vapor intrusion in commercial/industrial buildings.

Ground-disturbing activities for the Proposed Project include excavation for utilities (electrical, stormwater, sewer and water), excavations for the canopy, and other structure foundations. Excavations encountering contaminated soil could potentially result in adverse effects to workers, the public, or the environment. While excavations related to regrading would be up to 5 feet, excavations for utilities and structure foundations could exceed 5 feet. LAHD would notify the Certified Unified Program Agency (CUPA) if previously unknown underground storage tanks are identified. Additionally, discolored soil, or other indications of potential contamination, encountered during grading or excavation activities would be managed in accordance with the SMP (Final EIR Appendix D; LAHD, 2026).

Groundwater in the Project area is shallow, at depths of approximately 8 to 12 feet (Jacobs, 2025), with a typical depth of 10 feet bgs (LAHD, 2017) and could therefore be encountered during excavations for utilities and structure foundations. Groundwater dewatering is not anticipated for the Proposed Project; construction activities may require limited dewatering or "working in the wet". If groundwater is encountered during construction activities, it would be managed in accordance with POLA dewatering specifications (POLA, 2025). Measures such as sand filtration and water retention systems would be implemented to ensure any groundwater removed during construction activities is properly contained on site and not discharged to nearby surface water.

Operation

The Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962 (DTSC, 2024). Operation of the Proposed Project would not include any ground-disturbing activities, such that no existing soil or groundwater contamination would be encountered. However, soil vapor with levels of VOCs that exceed DTSC screening levels may be present and could pose a potential human health risk to workers from vapor intrusion into proposed buildings on the Project site. In addition, indoor activities occurring in the office/welfare buildings described in Section 2.5.2. have the potential for methane buildup, resulting in possible hazardous conditions for workers. Mobile fuel service trucks would provide diesel and propane for on-site equipment until 100 percent of yard equipment is transitioned to zero emissions by January 1, 2030. Mobile fuel service trucks would comply with all applicable local, state, and federal regulations, including requirements under the SPCC rule and California Code of Regulations for hazardous materials management.

Transport of diesel fuel would comply with regulations that apply to the shipment of hazardous materials on California highways and roads to ensure safe handling in general

transportation. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the project. Soil vapor with levels of VOCs that exceed DTSC screening levels may be present and could pose a potential human health risk to future building occupants. In addition, the Project site is identified as being located within a City-defined methane zone and methane buffer zone, which represents a potential risk of methane gas soil vapor intrusion for future building occupants.

Impact Determination

Construction. The Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962 (DTSC, 2024). Construction of the Proposed Project would not create a significant hazard to the public or environment related to the disturbance of a Cortese Listed Site.

The Project site is, however, identified as being located within a City-defined methane zone and methane buffer zone (LADBS, n.d.). Ground-disturbing activities during construction may have the potential to encounter elevated levels of methane gas, which could create a hazardous condition for construction workers. Compliance with LADBS General Methane Mitigation Requirements (LAMC Section 91.7103) would ensure that potential methane gas hazards are identified prior to construction and appropriate design measures are implemented to minimize potential hazards related to methane to construction workers and future Project site occupants.

LAHD would prepare a SMP in compliance with applicable regulatory requirements, and implementation of the plan would be a permit condition (Final EIR Appendix D; LAHD, 2026). The plan would identify known site contaminants, specify protocols for handling and managing contaminated media, including necessary personnel training, the use of appropriate personal protective equipment for construction personnel, stockpiling, and testing of excavated soils for off-site disposal at an appropriate licensed waste disposal facility, or reuse onsite if deemed suitable for industrial land use.~~, and appropriate containment and disposal at appropriate licensed waste disposal facilities.~~

In California, landfills are categorized by the types of waste they can accept: Class III landfills can accept non-hazardous solid waste, Class II landfills can accept designated wastes, and Class I landfills accept hazardous waste. The closest Port-approved nonhazardous (Class III) disposal facility to the Project site is Sunshine Canyon Landfill in Granada Hills (about 50 miles). The POLA does not have any approved Class II facilities. The closest Port-approved Class I hazardous waste facilities include Clean Harbors Buttonwillow (about 160 miles) and Waste Management Kettleman Hills (about 200 miles). As an alternative disposal method, soil could be hauled to a soil recycling facility, also known as a permanent thermal desorption unit, such as Soil Safe in Adelanto (100 miles from the Project site), which is permitted to treat SCAQMD Rule 1166 soils (i.e., VOC-contaminated soil). Final determination of the appropriate landfill would be determined by LAHD and its contractor(s) based on waste characterization data and other considerations.

Contaminated soil and groundwater would be properly handled, stored, transported off-site for disposal, or reused on site, if deemed suitable for industrial land use, ~~and disposed of~~ in compliance with the ~~approved~~ SMP~~,~~ and applicable California law, including as hazardous waste for soil meeting California's hazardous waste criteria. LAHD shall be responsible for complying with all requirements set forth in the SMP. Furthermore,

LAHD would comply with NPDES groundwater discharge requirements, and the Project's construction bid specifications would require as a standard practice the development of a health and safety plan and appropriate disposal of excavated soil with no reuse for residential purposes.

While the Project site is not included on the Cortese List and would implement a SMP as a permit condition, and comply with LADBS General Methane Mitigation Requirements, there remains a potential for contaminated soil, groundwater, or methane gas conditions to be encountered during construction of the Proposed Project. Therefore, impacts from contaminated soil, groundwater, and soil vapor would be potentially significant.

Operation. The Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962 (DTSC, 2024). Operation of the Proposed Project would not create a significant hazard to the public or environment related to the disturbance of a Cortese Listed Site. However, preliminary review of soil vapor data from the Pacific Edge 2017 Baseline Investigation using current DTSC HERO 3 screening levels indicates that VOC soil vapor may pose a human health risk to occupants in buildings/enclosed structures on the Project site resulting in a potentially significant impact. ~~Implementation of MM HAZ-1 would ensure that contaminated soil, groundwater, and soil vapor in areas of Project disturbance and where proposed buildings and structures would be built are characterized to allow for implementation of appropriate handling, storage, and disposal, including use of suitable personal protective equipment by workers, as part of the SMP, and proper design of a vapor intrusion mitigation system (VIMS) and vapor monitoring, if needed. Additionally, compliance with the LADBS General Methane Mitigation Requirements (LAMC Section 91.7103), as enforced by the City of Los Angeles Fire Department, would reduce the potential for adverse health impacts to workers in Project site structures from methane. Therefore, impacts from soil vapor intrusion would be reduced to a less-than-significant level.~~

Mitigation Measures

MM HAZ-1: Characterize Soil, Soil Vapor, and Groundwater Contamination. Prior to construction, Los Angeles Harbor Department (LAHD) or its contractor shall conduct soil and groundwater sampling and testing in areas of Project ground disturbance. Soil and groundwater testing shall include, at a minimum, testing for total petroleum hydrocarbons (TPH), Title 22 metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), organochlorine pesticides, perfluoroalkyl and polyfluoroalkyl substances (PFAS), and any other contaminants of determined to be of concern. Analytical testing shall be performed by a laboratory certified by the Environmental Laboratory Accreditation Program. Any soil and groundwater determined to be contaminated would be handled, stored, transported, and reused or disposed of in compliance with the Soil Management Plan, and applicable California law, including as hazardous waste for soil meeting California's hazardous waste criteria. Contamination identified outside or along the boundaries of Project ground disturbance shall be managed only to the extent necessary to support construction activities, identify vapor intrusion potential at future buildings, and protect future occupants.

Once the final building locations and dimensions are known and prior to design, subsurface vapor sampling of VOCs, oxygenates, methane, and gasoline range organics, at a minimum, shall be conducted at the final building locations in conformance with

"DTSC/LARWQCB Site Characterization Advisory, Active Soil Gas Investigations" (2012, revision 2015). Vapor data should then be evaluated using Department of Toxic Substances (DTSC) 2011 "Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air" and the February 2023 "Supplemental Guidance: Screening and Evaluating Vapor Intrusion" to determine if a vapor intrusion mitigation system (VIMS) should be installed at the building locations. Soil vapor sampling and evaluation shall be conducted by an experienced licensed professional. If a VIMS is determined to be required, the Project design shall be modified to incorporate a DTSC-approved VIMS in all buildings. Ongoing VIMS monitoring, such as quarterly sampling of vapor probes installed above and below barrier, shall be conducted and results reported to South Coast Air Quality Management District.

Residual Impacts

As discussed above, known contaminated soil, soil vapor, and groundwater exist on the Project site. Project-related construction work would involve routine site preparation, grading, excavation, and infrastructure/building construction, during which known or not previously identified contaminated soils, soil vapor, and/or groundwater not previously remediated may be encountered.

Implementation of MM HAZ-1 would ensure that contaminated soil, groundwater, and soil vapor in areas of Project disturbance and where proposed buildings and structures would be built are characterized to allow for implementation of appropriate handling, storage, and reuse or disposal, including use of suitable personal protective equipment by workers, as part of the SMP (Final EIR Appendix D; LAHD, 2026), and proper design of a vapor intrusion mitigation system (VIMS) and vapor monitoring, if needed. Additionally, compliance with the LADBS General Methane Mitigation Requirements (LAMC Section 91.7103), as enforced by the City of Los Angeles Fire Department, would reduce the potential for adverse health impacts to workers in Project site structures from methane. Therefore, impacts from soil, soil vapor intrusion, and groundwater during construction and operations would be reduced to a less-than-significant level.

~~Implementation of MM HAZ-1 would characterize contaminated soil, soil vapor, and groundwater in the area of Project disturbance and where Project building and structures would be built to allow for implementation of the SMP, including appropriate handling, storage, and disposal, use of suitable personal protective equipment by workers, and proper design of a VIMS and vapor monitoring if needed.~~

~~Impacts from contaminated soil, soil vapor, and groundwater would be reduced to a less-than-significant level with implementation of MM HAZ-1 and compliance with LADBS General Methane Mitigation Requirements (LAMC Section 91.7103).~~

3.4.5.2. Alternative 1 – No Project Alternative

Under this alternative, the Project site would remain unused, and the current soil and groundwater conditions would remain unchanged. No ground disturbance would occur.

Impact HAZ-1: Would the No Project Alternative (Alternative 1) 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?

The Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962 (DTSC, 2024). Under this alternative, the Project site would remain unused. As no ground disturbance would occur and no buildings would be constructed, the existing contaminated soil and groundwater underlying the Project site would not be handled or removed and soil vapor, including methane gas, would not intrude into an occupied structure. The existing soil and groundwater conditions under this alternative would remain the same as baseline conditions, as no construction or operational activities would occur.

Impact Determination

The No Project Alternative (Alternative 1) would not create a significant hazard to the public or environment related to the disturbance of a Cortese Listed Site. While the Project site contains contaminated soil and groundwater that could have the potential to impact the public and environment if a release of these substances occurs, under the No Project Alternative (Alternative 1) no construction or operational activities would occur and there would be no change to existing conditions. No impact would occur.

Mitigation Measures

Mitigation is not required.

Residual Impacts

No impacts would occur.

3.4.5.3. Alternative 2 – Reduced Project Alternative

In the Reduced Project Alternative (Alternative 2), the Project site area would be reduced from 89.2~~0~~ acres to 51.7 acres (71 acres [usable space]/2 + 16.2 acres other/outside loop) ~~40 acres~~, essentially utilizing half the usable space. Construction and operational activities would be identical to the Proposed Project, but with reduced intensity. Less ground disturbance for utilities, grading, and foundations would be required for the reduced Project footprint. Based on the 2017 Baseline Investigation by Pacific Edge, the reduced Project footprint would avoid some of the previously identified detections of soil contamination above LAHD soil guidance criteria (LAHD, 2017). However, not all exceedances identified in the 2017 data (e.g., selenium, dieldrin, aroclor-1254, and acetone) would be avoided, and some may remain within the reduced Project footprint. Furthermore, due to the Project Site size and history of industrial use, additional, previously unidentified contamination could still be present and may be encountered during redevelopment.

Impact HAZ-1: Would the Reduced Project Alternative (Alternative 2) 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?

The Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962 (DTSC, 2024). Contaminated soil, soil vapor, and groundwater would be encountered for ground-disturbing activities under Alternative 2.

Impact Determination

Due to the reduced footprint for this alternative, substantially less ground disturbance would occur and the number of buildings and structures to be constructed and operated at the site would be reduced by about half. This would result in less contaminated soil and groundwater being encountered that would need handling and disposal as a hazardous material/waste. It would also result in fewer structures that could have soil vapor intrusion resulting in a human health risk.

Similar to the Proposed Project, LAHD ~~would~~has prepared a SMP in compliance with applicable regulatory requirements to direct the management of the specific contaminated media that could reasonably be expected to be encountered at the Project site, and implementation of the plan would be a permit condition (Final EIR Appendix D; LAHD, 2026). Any soil and groundwater determined to be contaminated would be handled, stored, transported, and disposed of in compliance with the SMP, and applicable California law, including as hazardous waste for soil meeting California's hazardous waste criteria. LAHD would also comply with NPDES groundwater discharge requirements, and the Project's construction bid specifications would require as a standard practice the development of a health and safety plan and appropriate disposal of excavated soil with no reuse for residential purposes.

Since the Project Site is located in a methane zone and methane buffer zone, compliance with the LADBS Methane Mitigation Standards would be required to ensure that potential methane gas hazards are identified prior to construction. Appropriate design measures would be implemented to minimize potential hazards related to methane to construction workers and future Project Site occupants.

While the Project site is not included on the Cortese List and would implement a SMP as a permit condition, and comply with LADBS General Methane Mitigation Requirements, there remains a potential for contaminated soil, groundwater, or methane gas conditions to be encountered during construction of the Reduced Project Alternative (Alternative 2). Therefore, impacts from contaminated soil, groundwater, and soil vapor would be potentially significant.

Mitigation Measures

MM HAZ-1: Characterize Soil, Soil Vapor, and Groundwater Contamination. Refer to Proposed Project for full mitigation measure text.

Residual Impacts

The Reduced Project Alternative (Alternative 2) would not create a significant hazard to the public or environment related to the disturbance of a Cortese Listed Site.

As with the Proposed Project, implementation of MM HAZ-1 would characterize contaminated soil, groundwater, and soil vapor in the area of Project disturbance and where Project building and structures would be built to allow for implementation of appropriate handling, storage, and reuse or disposal, including use of suitable personal protective equipment by workers, and proper design of a VIMS and vapor monitoring if needed.

Impacts from contaminated soil, groundwater, and soil vapor would be reduced to a less-than-significant level with implementation of MM HAZ-1 and compliance with LADBS General Methane Mitigation Requirements (LAMC Section 91.7103).

3.4.5.4. Summary of Impact Determinations

Table 3.4-1 summarizes the CEQA impact determinations of the Proposed Project and alternatives related to Hazards and Hazardous Materials. This table is meant to allow easy comparison of the potential impacts of the Proposed Project and alternatives. Identified potential impacts may be based on federal, state, or City of Los Angeles significance criteria, LAHD criteria, and the scientific judgment of the report preparers.

For each potential impact, the table provides the CEQA impact determinations, applicable mitigation, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table.

Table 3.4-1: Summary Matrix of Potential Impacts and Mitigation Measures for Hazards and Hazardous Materials

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation Measures	Residual Impacts
Proposed Project	**HAZ-1:** Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and create a significant hazard to the public or the environment.	Potentially Significant	**MM HAZ-1:** Characterize Soil, Soil Vapor, and Groundwater Contamination	Less Than Significant
Alt 1 – No Project		No Impact	Mitigation Not Required	No Impact
Alt 2 – Reduced Project		Potentially Significant	**MM HAZ-1:** Characterize Soil, Soil Vapor, and Groundwater Contamination	Less Than Significant

3.4.5.5. Mitigation Monitoring

MM HAZ-1 would be applied to the Proposed Project and Alternative 2 as a condition of approval. Mitigation is not applicable to Alternative 1 (No Project Alternative).

Mitigation Measure	**MM HAZ-1: Characterize Soil, Soil Vapor, and Groundwater Contamination.** Prior to construction, Los Angeles Harbor Department (LAHD) or its contractor shall conduct soil and groundwater sampling and testing in areas of Project ground disturbance. Soil and groundwater testing shall include, at a minimum, testing for total petroleum hydrocarbons (TPH), Title 22 metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), organochlorine pesticides, perfluoroalkyl and polyfluoroalkyl substances (PFAS), and any other contaminants of determined to be of concern. Analytical testing shall be performed by a laboratory certified by the Environmental Laboratory Accreditation Program. Any soil and groundwater determined to be contaminated would be handled, stored, transported, and reused or disposed of in compliance with the Soil Management Plan, and applicable California law, including as hazardous waste for soil meeting California's hazardous waste criteria. Contamination identified outside or along the boundaries of Project ground disturbance shall be managed only to the extent necessary to support construction activities, identify vapor intrusion potential at future buildings, and protect future occupants. Once the final building locations and dimensions are known and prior to design, subsurface vapor sampling of VOCs, oxygenates, methane, and gasoline range organics, at a minimum, shall be conducted at the final building locations in conformance with "DTSC/LARWQCB Site Characterization Advisory, Active Soil Gas Investigations" (2012, revision 2015). Vapor data should then be evaluated using Department of Toxic Substances (DTSC) 2011 "Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air" and the February 2023 "Supplemental Guidance: Screening and Evaluating Vapor Intrusion" to determine if a vapor intrusion mitigation system (VIMS) should be installed at the building locations. Soil vapor sampling and evaluation shall be conducted by an experienced licensed professional. If a VIMS is determined to be required, the Project design shall be modified to incorporate a DTSC-approved VIMS in all buildings. Ongoing VIMS monitoring, such as quarterly sampling of vapor probes installed above and below barrier, shall be conducted and results reported to South Coast Air Quality Management District.
Timing	Soil, soil vapor, and groundwater sampling and testing: Prior to Construction. Installation of a VIMS: During Construction.
Methodology	LAHD will include MM HAZ-1 in the contract specifications for construction.

3.4.6. Significant Unavoidable Impacts

No significant unavoidable impacts related to hazards or hazardous materials would occur during construction or operation of the Proposed Project or alternatives.