Section 3.5

Hydrology and Water Quality

Section Summary

This section evaluates whether the Proposed Project would cause a new or substantially more severe significant adverse environmental impact related to hydrology and water quality from the impacts that were previously identified and found to be less than significant in Section 3.4 of 1996 Certified Environmental Impact Report (EIR) (SCH No. 93071074). (Pub. Resources Code, Section 21166; California Environmental Quality Act (CEQA) Guidelines, Section 15162.) Specifically, as discussed herein, there are no new reasonably foreseeable significant impacts or substantially more severe impacts related to the Proposed Project from either a substantial change to the Project or the circumstances under which the site would continue to be operated under the Project (see CEQA Guidelines, Section 15162, subds. (a)(1)-(2)), nor has there been new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time of the prior EIR, discovered to warrant a new significant impact conclusion (see CEQA Guidelines, Section 15162, subdivision (c)).

Section 3.5, Hydrology and Water Quality, provides the following:

- A description of the existing hydrological environmental setting in the Port of Los Angeles (POLA or Port) area
- A description of the existing drainage control measures implemented at the Project site
- A description of applicable program and regulations regarding water quality
- A discussion on the methodology used to determine whether the Proposed Project would adversely change the existing physical conditions (e.g., drainage patterns) or increase potential sources of pollution in runoff
- An impact analysis of the Proposed Project
- A description of any mitigation measures proposed to reduce new significant adverse impacts, if any.

Key Points

The 1996 Certified EIR did not identify any significant impacts, and no mitigation was required related to hydrology and water quality.

Operations under the Proposed Project's Phase 1 - Continued Operation would continue as under existing conditions, which include implementation of a Stormwater Pollution Prevention Plan (SWPPP) and the stormwater drainage control system.

The facility operations are currently regulated by the National Pollution Discharge Elimination System (NPDES) Industrial General Permit, which regulates discharges from the site.

The Phase 2 - Non-operational Restoration Period would include remediation via removal of contaminated soils currently present at the site, which should remove source contaminants that are adversely affecting groundwater quality and be an improvement to existing conditions.

Mitigation measures are not required.

The Proposed Project would not result in any new or substantially more severe significant impacts to hydrology or water quality.

3.5.1 INTRODUCTION

This section evaluates whether the Proposed Project would cause a new or more severe significant adverse environmental impact related to water quality and hydrology from the impacts that were previously identified and found to be less-than-significant in the 1996 Certified EIR based on the proposed changes under which the Project would continue to be operated.

The Initial Study/Notice of Preparation (IS/NOP) that was completed in March 2023, indicated that the Proposed Project has the potential to result in a significant impact related to water quality standards, waste discharge requirements, and the potential presence of emerging chemicals (i.e., per- and poly-fluoroalkyl substances [PFAS]) have the potential to adversely affect water quality of surface or groundwater. The IS/NOP also found that the Proposed Project has the potential to cause significant environmental impacts and may result in a substantially increased public health and safety concerns as a result of the accidental release, spill, or explosion of hazardous materials due to a tsunami or seiche if cleanup of the Proposed Project site is needed in the event of site inundation. This section evaluates the significance of these potential impacts.

3.5.2 ENVIRONMENTAL SETTING/CEQA BASELINE

3.5.2.1 Surface Water

The Proposed Project is located within POLA, which is in San Pedro Bay in the City of Los Angeles, California. The Proposed Project area is in the Dominguez Watershed (State Water Resources Control Board [SWRCB] Hydrologic Unit 405.12), which encompasses an area of 133 square miles of land and water. The watershed is bordered by the City of Inglewood on the north, the City of Torrance on the west, and the federal breakwaters of Los Angeles and Long Beach Harbors (LA/LB Harbors) on the south. Approximately 93% of the land within the watershed is developed, and 62% of stormwater runoff from these lands drains to the Dominquez Channel, which drains into the Los Angeles Harbor. The remaining runoff drains into retention basins.

The Dominguez watershed comprises five subwatersheds: the Upper Channel, Lower Channel, Machado Lake, retention basins, and Harbors sub-watersheds. The Proposed Project occurs within the Harbors sub-watershed, which has an area of 36.7 square miles and covers portions of the cities of Los Angeles, Long Beach, Rancho Palos Verdes, and Rolling Hills. The Harbors sub-watershed drains directly into the LA/LB Harbors.

The Los Angeles Harbor has been physically modified through past dredging and filling projects, as well as by the construction of breakwaters and other structures. Los Angeles Harbor is adjacent to Long Beach Harbor, and they function oceanographically as one unit. This is due to an inland connection via Cerritos Channel and because they share Outer Harbors behind the San Pedro, Middle, and Long Beach breakwaters. In addition, an opening in the causeway leading to Pier 400 was designed to enhance circulation.

3.5.2.2 Water Quality

The waters of LA/LB Harbor are governed by federal, state, and local regulations. Water quality in San Pedro Bay has improved greatly over the last 40 years through compliance with these regulations, better pollution-source control, and dredging that has removed accumulated contaminants in harbor

sediment. However, legacy contaminants flow into the harbor from port land, and upstream sources in the watershed well beyond the ports' boundaries. The *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) specifies beneficial uses that apply to water bodies with the potential to be affected by the Proposed Project. A beneficial use is one of the various ways that water can be used for the benefit of people and/or wildlife. The 303(d)-listed impairments for the Los Angeles/Long Beach Inner Harbor, where the Proposed Project is located, are based on the 2020/2022 California Integrated Report.

Table 3.5-1. Existing Beneficial Uses for Surface Waters of Water Bodies with Potential to Be Affected by the Project

Water Body	Designated Beneficial Uses
Los Angeles: Long Beach Harbor (Inner Areas)	IND; NAV; COMM; MAR; RARE a; SHELL; REC-1 b; REC-2

Source**:** Los Angeles RWQCB 2014.

[a] One or more rare species utilizes all ocean, bays, estuaries, and coastal wetlands for foraging and/or nesting.

[b] Potential beneficial use.

COMM= Commercial and Sport Fishing; IND= Industrial Service Supply; MAR = Marine Habitat; NAV = Navigation; RARE=Rare; Threatened or Endangered Species; REC-1=Water Contact Recreation; REC-2=Non-contact Water Recreation; RWQCB = Regional Water Quality Control Board; SHELL = Shellfish Harvesting.

Table 3.5-2. Water Quality Impairments within the Project Area: Los Angeles/Long Beach Inner Harbor

Listed 303(d) Impairments	Potential Sources	EPA TMDL Report Completion
Copper	Source Unknown	March 23, 2012
DDT	Source Unknown	March 23, 2012
PCBs	Source Unknown	March 23, 2012
Toxicity	Source Unknown	March 23, 2012
Zinc	Source Unknown	March 23, 2012
Benthic Community Effects	Source Unknown	March 23, 2012
Benzo(a)pyrene	Source Unknown	March 23, 2012
Chrysene	Source Unknown	March 23, 2012

Source: SWRCB 2022.

DDT = Dichlorodiphenyltrichloroethane; EPA=U.S. Environmental Protection Agency; PCBs = Polychlorinated biphenyls; TMDL=total maximum daily load.

In accordance with Section 303 (d)(1)(C), states are required to develop a TMDL for pollutants not meeting the effluent limitations and at a level necessary to implement the established water quality standards. A TMDL represents the maximum amount of a pollutant a waterbody can receive and still meet water quality standards. The *Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters* (Harbor Toxics TMDL) became effective on March 23, 2012. The Harbor Toxics TMDL was promulgated to protect and restore fish tissue, water, and sediment quality in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters (including Consolidated Slip and Greater Harbor Waters).

Compliance with the Harbor Toxics TMDL includes assessment of water quality chemistry concentrations performed twice every 5 years by the Regional Monitoring Coalition. Most recent water quality monitoring was conducted during three separate events: one dry event conducted in summer

of 2021 and two wet weather events: October 2021 and December 2021, respectively (Anchor 2022). Analytical results were compared to CTR Criteria for the Protection of Aquatic Life – Saltwater Chronic (CTR criteria [aquatic life]) and CTR Criteria for the Protection of Human Health – Consumption of Organisms Only (CTR criteria [human health]). In general, analytical results showed concentrations at nondetectable levels or below applicable water quality criteria, with the exception of dissolved copper, total PCBs, and total DDT at one or more stations in one or more sampling events (a detailed review of these exceedances are presented in the following sections).

General water quality physical parameters are characterized during the Biological Surveys of the Los Angeles and Long Beach Harbors and have been summarized in the latest 2018 surveys. Parameters described below included water temperature, dissolved oxygen (DO) concentration, water clarity and turbidity, pH, salinity, and chlorophyll-a concentration (as a measure of planktonic algae).

Water temperatures varied by season and depth, with summer surface temperatures reaching 21.9° C. Surface temperatures did not show large differences between Inner Harbor and Outer Harbor, although bottom temperatures in spring and summer were lower at Outer Harbor Stations compared to Inner Harbor and Shallow Water Habitat stations. The past three Biosurveys (2000, 2008, and 2013) occurred during cool oceanic regimes, according to the Oceanic Niño Index and sea-surface temperature records for the last 20 years in San Pedro Bay. Conversely, the 2018 Biosurvey occurred during a warm regime, in addition to following a large marine heatwave event that persisted in the Southern California Bight from 2014-2016. The signal from the marine heatwave within the Port Complex was also recorded in monthly monitoring from 2008-2018 within POLA at Inner and Outer Harbor stations at the surface and the bottom.

DO concentrations were above the Basin Plan water quality objective of 5.0 milligrams per liter (mg/L) at every station in all three seasons with two exceptions: the concentration at the bottom of the water column at the Fish Harbor station was 3.6 mg/L in spring and summer. Fish Harbor has a history of low DO concentrations at depth, which have been attributed to restricted circulation and the presence of historical fish processing wastes in the sediments.

Water clarity at Outer Harbor stations showed little variation with either season or depth, but at some Inner Harbor stations clarity fell to as low as 20% light transmittance, as opposed to typical values elsewhere in the Port Complex of 60%–80%. According to monthly monitoring surveys within POLA from 2009–2018, Inner and Outer Harbor stations showed modest improvement in average water clarity (measured as transmittance and turbidity) in 2015–2018 compared to 2010–2014.

PH values in the Port Complex varied little with season, depth, or location, and were consistent with typical coastal ocean waters. The average pH values harbor wide across all seasons ranged from 8.09–8.47.

Salinity in the Port Complex varied little in spring and summer with depth or location, and values were typical of the nearshore coastal ocean (33.5 practical salinity unit (PSU)). In winter, however, lower salinity occurred in the surface layers at numerous stations as a result of stormwater runoff from the Los Angeles Basin, with salinity ranging from 30.9-33.4 PSU.

Chlorophyll concentrations were similar in summer and winter throughout the Port Complex (1.2-2.1 micrograms per liter (µg/L)), but values were higher in spring (average of 3.7 µg/L) at the surface and 4.4 µg/L near the bottom), reflecting the typical “spring bloom” of planktonic algae. As would be expected in a coastal embayment such as San Pedro Bay, concentrations were generally somewhat higher than in nearby open coastal waters, which average 1-2 µg/L.

3.5.2.3 Project Site Hydrology

The Project site is almost entirely paved and impervious with the only exceptions being the relatively small, landscaped areas by the office building. The concrete and asphalt pavement is considered a cap, regulated by the Los Angeles Regional Water Quality Control Board (LARWQCB) to address the underlying contaminants of concern in the soil and groundwater (discussed in more detail below). As part of the regulatory oversight by the LARWQCB, the Project site undergoes inspections on a regular basis and any signs of degradation or cracks to the existing cap are repaired, as needed. There is an existing stormwater collection system on site that is designed to capture all stormwater and dust control water from the yard operations for reuse on site in accordance with the SWRCB General Permit to Discharge Storm Water Associated with Industrial Activity (General Permit No. CAS000001), adopted by the LARWQCB on April 1st, 2014, Order No. 2014-0057-DWQ as amended in 2015 and 2018.

Stormwater collected on site is directed to underground detention basins throughout the site, with a total capacity of approximately 90,000 gallons. There are also 10 aboveground storage tanks on site, each with a capacity of 42,000 gallons. The drainage system employs a multi-stage chemical treatment process to provide water treatment prior to any off-site discharges. This process 1) effectively reduces the concentrations of contaminants of concern, 2) does not rely on significant changes in pH or other basic parameters, and 3) is consistent with the Best Available Technology (BAT) Economically Achievable and Best Conventional Pollutant Control Technology (BACT) mandate established in the existing NPDES Industrial General Permit that has been issued for the site. All stormwater exposed to industrial activity (i.e., receiving, shredding, depollution, dismantling, welding, torch-cutting, materials storage and recovery) is captured and reused, or treated prior to off-site discharge. In rare instances, when stormwater cannot be contained for use on site, it is chemically treated and discharged to either of two storm drains, one near the site entrance and one on adjacent Los Angeles Harbor District (LAHD) property. Both drains connect to the Cerritos Channel.

3.5.2.4 Groundwater

The Proposed Project site is within the Coastal Plain of Los Angeles – West Coast groundwater basin, which covers an area of approximately 91,300 acres. The basin is bound on the north by the Ballona Escarpment, to the east by the Newport-Inglewood fault zone, and on the south and west by the Pacific Ocean and consolidated rocks of the Palos Verdes Hills. The Department of Water Resources (DWR) considers the West Coast Basin a very low priority basin pursuant to the Sustainable Groundwater Management Act, due to its adjudication (DWR 2023). In the West Coast subbasin, the most critical issue is high concentrations of total dissolved solids (TDS), an indicator of salt content, along the Pacific Ocean coast due to seawater intrusion. Recharge occurs primarily by injection of imported water and reclaimed water into wells of the seawater intrusion barrier and by underflow from the Central Basin. Groundwater flow directions are controlled by the engineered recharge and by groundwater pumping from the numerous wells distributed across the region (Fram and Belitz 2012).

Groundwater beneath the Project site would have high TDS concentration levels due to its location and is not a viable source of water supply. In addition, as also discussed in Section 3.4, Hazards, multiple groundwater monitoring wells have been constructed on the site related to an investigation regarding a petroleum hydrocarbon release at the site that occurred in 1988. There are 15 groundwater monitoring wells still present on the site; 5 are actively used for groundwater monitoring associated with the leaking underground storage tank case, and 11 wells are used for semi-annual gauging of groundwater levels. Groundwater at the site is between 6 and 11 feet below ground surface and adversely affected by the past release of diesel fuel, which occurs as free phase petroleum product (floating on top of the groundwater table). Groundwater sampling has been conducted at the site semiannually beginning in 2012 and are ongoing. As of June 2023, free product recovery is still being

conducted, but the amount recovered has been decreasing over time. Recovery utilizes passive skimmers installed in 4 on-site wells, absorbent socks in 1 well, and by manual bailing in another well as part of the cleanup being administered through the 1997 Remediation Action Plan (Clayton Environmental 1997). Monitoring data indicated that diesel and VOC concentrations were generally decreasing over time.

3.5.2.5 Flooding

The Federal Emergency Management Agency (FEMA) has determined that the Project site is not located within a flood hazard zone, which is defined as having an 1% annual chance of flooding (also known as the 100-year flood zone) (FEMA 2023).

3.5.2.6 Tsunamis and Seiche Waves

A seismic sea wave or tsunami is produced by a large displacement of the ocean bottom and can move at velocities of up to 500 miles per hour in deep ocean water. In the deep ocean, tsunamis can be only a few feet high. As the tsunami reaches shallower coastal waters, it travels much slower and wave energy is compressed, which can lead to a rapid and dramatic increase in wave height. Generally, a tsunami is not a single wave but a series of waves, and the first wave may not be the largest. Tsunami waves are often destructive, leading to property damage and sometimes loss of life. In some cases, the coastal waters are drawn out into the ocean just before the tsunami strikes. When this occurs, more shoreline may be exposed than even at the lowest tide.

Typically, hazardous tsunamis along the California coastline are associated with seismic events and are caused by vertical displacement of submarine faults. They can also occur as a result of submarine landslides that may or may not occur in conjunction with seismic activity. According to mapping compiled by the California Geological Survey, the entire Port including the Proposed Project site is considered to be within a tsunami hazard zone that could be subject to inundation (CGS 2023).

3.5.2.7 Sea Level Rise

Scientific evidence indicates the potential for sea level rise (SLR) due to the rapidly accelerating and irreversible ice loss that could result in upwards of 6–10 feet of SLR sometime into the future (CCC 2021 and OPC 2018). A Sea Level Rise Adaptation Study was conducted by the Port of Los Angeles in 2018 to assess the potential impacts of rising sea levels on the Port's infrastructure and operations. The study assessed the Port's vulnerability to SLR, examined potential impacts of several SLR scenarios on critical port infrastructure, and identified adaptation strategies to manage the risks. The study assessed several SLR scenarios that represent a range of scenarios for planning and adaptation purposes. These scenarios included an SLR of 12 inches by the year 2030, 24 inches by the year 2050, and 37 inches by the year 2100. Additionally, each SLR scenario was assessed under two tide conditions: daily tidal levels and the 100-year storm tide, representing permanent inundation and temporary flooding, respectively. Since the Proposed Project is proposing a 10-year lease extension followed by an up to 5-year non-operational restoration period, the 12 inches in year 2030 would be the most relevant scenario for the Proposed Project.

Figure E-4 of the study shows that the Proposed Project site would remain free of inundation and flooding if the sea level rises by 12 inches in the year 2030 and by 24 inches in the year 2050.

3.5.3 REGULATORY SETTING

3.5.3.1 Federal Regulations

Clean Water Act

Increasing public awareness and concern for controlling water pollution led to the enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA) (33 USC 1251 et seq.). The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The CWA established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA. The CWA establishes several major integrated regulatory programs, standards, and plans, which include the following:

- National Pollutant Discharge Program
- National and Local Pretreatment Standards (Section 307)
- Dredge or Fill Discharge Permit Program (Section 404)
- Sewage Sludge Use and Disposal Program (Section 405)
- Water Quality Management (Sections 106, 205(j), non-construction management 205(g), 208, 303 and 305)

Section 401 of the Clean Water Act (Water Quality Certification)

Section 401 of the CWA requires that an applicant for any federal permit (e.g., a U.S. Army Corps of Engineers Section 404 permit) obtain certification from the state, requiring that discharge to waters of the United States would comply with provisions of the CWA and with state water quality standards. For example, an applicant for a permit under Section 404 of the CWA must also obtain water quality certification per Section 401 of the CWA. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers prior to discharging dredged or fill material into waters of the United States unless such a discharge is exempt from CWA Section 404. For the Project area, the LARWQCB must provide the water quality certification required under Section 401 of the CWA.

Section 402 of the Clean Water Act (NPDES)

The CWA was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The NPDES permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States (33 USC 1342). In California, the Environmental Protection Agency (EPA) has authorized the SWRCB permitting authority to implement the NPDES program.

In accordance with the CWA, the EPA issued its 2022 Construction General Permit for stormwater discharges during construction activities on January 18, 2022.

Section 404 of the CWA

Section 404 of the CWA established a permitting program to regulate the discharge of dredged or fill material into waters of the United States, which include wetlands adjacent to national waters (33 USC 1344). This permitting program is administered by the U.S. Army Corps of Engineers and enforced by the EPA.

3.5.3.2 State Regulations

California Porter-Cologne Water Quality Control Act

Since 1973, the California SWRCB and its nine RWQCBs have been delegated the responsibility for administering permitted discharge into the waters of California. The Project site falls within the jurisdiction of the LARWCQB. The Porter-Cologne Water Quality Act (California Water Code Section 13000 et seq.; California Code of Regulations, Title 23, Division 3, Chapter 15) provides a comprehensive water-quality management system for the protection of California waters. Under the Act, "any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state" must file a report of the discharge with the appropriate RWQCB. Pursuant to the Act, the RWQCB may then prescribe "waste discharge requirements" that add conditions related to control of the discharge. Porter-Cologne defines "waste" broadly, and the term has been applied to a diverse array of materials, including non-point source pollution. When regulating discharges that are included in the Federal Clean Water Act, the state essentially treats Waste Discharge Requirements and NPDES as a single permitting vehicle. In April 1991, the SWRCB and other state environmental agencies were incorporated into the California EPA.

The RWQCB regulates urban runoff discharges under the NPDES permit regulations. NPDES permitting requirements cover runoff discharged from point (e.g., industrial outfall discharges) and non-point (e.g., stormwater runoff) sources. The RWQCB implements the NPDES program by issuing construction and industrial discharge permits.

Under the NPDES permit regulations, BMPs are required as part of a SWPPP. The EPA defines BMPs as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the United States." BMPs include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage" (40 CFR 122.2).

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High-Quality Water in California, was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state (e.g., isolated wetlands and groundwater), not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality shall be maintained, and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of such water resource.

California Toxics Rule

The EPA has established water quality criteria for certain toxic substances via the California Toxics Rule. The California Toxics Rule established acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water, such as inland surface waters and enclosed bays and estuaries, that are designated by each RWQCB as having beneficial uses protective of aquatic life or human health.

California NPDES Construction General Permit

In order to comply with the CWA and its mandate to control pollutants in stormwater, the SWRCB issued the Statewide Construction General Permit for Stormwater Discharges. The Construction General Permit was adopted September 8, 2022, and became effective September 1, 2023. This permit covers construction projects that include construction or land disturbance activities that result in a

disturbance of 1 or more acres, or less than 1 acre but are part of a larger common plan of development or sale that totals 1 or more acres of land disturbance.

Under the General Construction Permit, a SWPPP must be developed that describes BMPs the discharger would use to protect stormwater runoff. The BMPs must be designed to prevent, to the maximum extent practicable, an increase in the sediment yield and flow velocity from pre-construction/pre-development conditions, to assure that applicable water quality standards, including TMDL waste allocations, are met.

California NPDES Industrial Stormwater Program

The Statewide General Permit for Stormwater Discharges Associated with Industrial Activities (Industrial General Permit) implements the federally required stormwater regulations in California for stormwater associated with industrial activities discharging to waters of the United States. The Industrial General Permit regulates discharges associated with 9 federally defined categories of industrial activities. The Project site is under the jurisdiction of the LARWQCB. Stormwater discharges from the site are currently permitted under the SWRCB General Permit to Discharge Storm Water Associated with Industrial Activity (General Permit No. CAS000001), adopted by the LARWQCB on April 1st, 2014, Order No. 2014-0057-DWQ as amended in 2015 and 2018.

3.5.3.3 Local Regulations

Los Angeles Regional MS4 Permit

The LARWQCB regulates discharges from municipal separate storm sewer systems (MS4s) through the Los Angeles and Ventura counties' MS4 Permit (Order No. R4-2021-0105). These permits are issued under the NPDES Program and covers the City of Los Angeles and 84 other municipalities within Los Angeles County. The City of Los Angeles Department of Public Works plays a large role in the administration of the MS4 permit structure that covers the Port and its tenants' Public Agency Activity Program components. The City of Los Angeles is ultimately responsible for administering administration and reporting requirements in the MS4 permit citywide, including the Harbor District, with the Port providing additional oversight and assistance at the harbor.

The Port leases property to a variety of industrial and commercial tenants. Tenants are required to comply with the appropriate NPDES permit requirements for their facility. Tenants file and report directly with the Los Angeles to the State Water Resources Control Board RWQCB for the NPDES General Industrial Stormwater Permit or to the LARWQCB for individual NPDES permits. The Port maintains an outreach and coordination effort with its tenants including providing stormwater outreach materials for tenants, conducting site evaluations for select tenants to assist them in understanding their NPDES permit compliance General Industrial Stormwater Permit responsibilities requirements and identifying activities that require BMPs to prevent stormwater pollution.

Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties

Discharges of treated or untreated groundwater generated from permanent or temporary dewatering operations or other applicable wastewater discharges not specifically covered in other general or individual NPDES permits are currently regulated under a regional general permit, General Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2018-0125, NPDES No. CAG994004).

Construction dewatering wastes (except stormwater) are regulated as low-threat discharges to surface waters. A Notice of Intent (NOI) and report of waste discharge must be submitted to the LARWQCB to comply with this general permit. Based on the depth to groundwater, it is not anticipated that the Proposed Project would require groundwater dewatering during Phase 2 restoration activities or be subject to the requirements of this general permit. In the event that groundwater is encountered during site restoration, it would be covered under the NPDES Construction Stormwater General Permit Order 2022-0057-DWQ Construction.

City of Los Angeles Planning and Zoning Code

The City of Los Angeles Municipal Code contains provisions for water quality-related requirements applicable to the Proposed Project as listed below.

- Section 64.70: Stormwater and Urban Runoff Pollution Control: This article sets forth uniform requirements and prohibitions for discharges and places of discharge into the storm drain system and receiving waters necessary to adequately enforce and administer all federal and state laws, legal standards, and orders that provide for the protection, enhancement, and restoration of water quality.
- Section 64.72: Stormwater Pollution Control Measures for Development Planning and Construction Activities: This section contains requirements for construction activities and facility operations of development and redevelopment projects to comply with the land development requirements of the MS4 permit though integrating low impact development (LID) practices and standards for stormwater pollution mitigation, and maximize open, green and pervious space on all developments and redevelopments consistent with the City of Los Angeles's landscape ordinance and other related requirements in the Development Best Management Practices Handbook.

In addition, Division 70, Grading, Excavation, and Fills, includes provisions for erosion control and grading permits.

City of Los Angeles Low Impact Development Ordinance

In 1998 the City of Los Angeles passed a stormwater ordinance (Los Angeles Municipal Code 64.70), which prohibits the entry of illicit discharges into the municipal storm drain system. In 2011 the City of Los Angeles adopted a LID Ordinance, updated in 2015, which amends Los Angeles Municipal Code 64.70 and requires runoff to be captured, infiltrated and/or used on site at most developments and redevelopments.

3.5.4 METHODOLOGY

Phase 1 - Continued Operation

The potential for new significant impacts caused by the Proposed Project related to hydrology and water quality during the Phase 1 - Continuing Operation activities was assessed based on existing conditions, Project characteristics (e.g., a continuation of existing ongoing operations), and existing regulatory requirements. Existing conditions are in part based on the findings presented in the Hazardous Materials Technical Report (on file with LAHD (Dudek 2023)), which is also summarized and discussed in Section 3.4, Hazards, of this document. Project characteristics consider that the Proposed Project would continue operations that are already occurring at the site as identified in the Project Description and no physical improvements or material changes to existing operations would occur over the next ten years. Impacts would be considered significant if any of the significance criteria listed below occur in association with continued operation of the Proposed Project.

Phase 2 - Non-operational Restoration

Potential impacts associated with the Phase 2 - Non-operational Restoration activities of the Project assume that following demolition of on-site structures, the site would be remediated through excavation and off-site disposal of contaminated soils consistent with oversight by the LARWQCB and/or the Department of Toxic Substances Control (DTSC).

CEQA Baseline

As noted above, the CEQA Baseline for the Proposed Project as it relates to Hydrology and Water Quality assumes that the existing drainage system would operate consistent with current operations. In addition, the analysis assumes continued compliance with the existing NPDES Industrial General Permit and any corrective actions required by RWQCB or DTSC.

3.5.5 THRESHOLDS OF SIGNIFICANCE

The following criteria are based on the Los Angeles CEQA Thresholds Guide (City of Los Angeles 2006) and the CEQA Appendix G checklist and are the basis for determining the significance of impacts associated with Hydrology and Water Quality resulting from implementation of the Proposed Project.

The IS/NOP (Appendix A) provided an analysis of the Proposed Project compared to the Approved Project that was analyzed in the 1996 Certified EIR and identified less than significant impacts related to groundwater supplies or recharge, alteration of drainage patterns, erosion or siltation, impacts related to flood flows and conflicts with the implementation of a water quality control plan or sustainable groundwater management plan. The IS/NOP also identified no impacts related to surface runoff that would result in flooding or would exceed planned stormwater drainage systems or provide substantial additional sources of polluted runoff. As such, these are not discussed in the subsequent sections.

The only thresholds that were identified as potentially significant and required further analysis in the IS/NOP were as follows:

> **HYD–1:** Would the Proposed Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
>
> **HYD–2:** Would the Proposed Project risk release of pollutants due to inundation from a flood hazard, tsunami, or seiche zone?

These thresholds apply to both the Phase 1 - Continued Operations and the Phase 2 - Non-operational Restoration Phases of the Proposed Project.

3.5.6 IMPACT DETERMINATION

3.5.6.1 Impact HYD-1: Would the Proposed Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Findings in the 1996 Certified EIR

The findings of the 1996 Certified EIR concluded that remediation and construction activities would not significantly alter runoff rates, implementation of the SWPPP would minimize construction impacts and the dredging on Berths 210-211 would remove some pollutants while the increased turbidity

would only be temporary and limited in extent. In addition, the soil remediation and placement of an asphalt/concrete cap would prevent contamination of surface runoff while the operational SWPPP would include pollution prevention BMPs to treat stormwater runoff prior to discharge. No significant impacts were identified, and no mitigation was required.

Impacts of the Proposed Project

Phase 1: Continued Operations

Operationally, the Proposed Project would continue during Phase 1 as a scrap metal recycling facility with no material changes to the existing ongoing operations, routine maintenance, or replacement of existing equipment that may be necessary during the term of the proposed extension. The existing and ongoing groundwater monitoring and free product recovery of the 1988 diesel fuel release would continue as under existing conditions, with no changes proposed, which should provide gradual improvement in groundwater quality. The existing stormwater control system would continue to operate in accordance with the current SWPPP that is consistent with the NPDES Industrial General Permit and provide water quality treatment prior to any off-site discharge.

Since certification of the 1996 Certified EIR, there has been an increased focus on what are known as emerging contaminants such as PFAS, which are being considered by the EPA for listing as hazardous substances under the Comprehensive Response, Compensation, and Liability Act (CERCLA). PFAS is a family of more than 3,000 man-made and mostly unregulated chemicals that have been produced since the mid-1900s (SWRCB 2019). They are mobile, persistent, and bioaccumulative. They are resistant to degradation in the environment and when degradation occurs, it often results in the formation of other PFAS compounds. PFAS are extremely persistent in the environment and highly mobile in water. People can be exposed to PFAS through food, food packaging, consumer products, house dust, and drinking water. Since these chemicals have been used in an array of consumer products, scientists have found Perfluorooctanoic Acid and Perfluoro-1-octanesulfonic acid in the blood of nearly all people tested. Exposure through drinking water has become an increasing concern due to the tendency of PFAS to accumulate in groundwater. The EPA has recently proposed Maximum Contaminant Levels for six specific PFAS compounds under the Safe Drinking Water Act; however, groundwater beneath the Project site is not a source of drinking water.

PFAS are used in the aerospace, automotive, chemical, electronics, metal coatings and plating, and textiles industries due to their friction-reducing characteristics. Potential firefighting sources of PFAS include airports and aviation facilities, military bases and training centers, petroleum refineries and terminals, and petrochemical production facilities. Non-industrial PFAS sources include waste disposal facilities, wastewater treatment plant operations, and biosolids application to agriculture. Secondary sources of PFAS include waste streams such as landfills and wastewater treatment plants.

PFAS compounds are not stored or used directly as part of operations at the Project site but could potentially be included as part of the throughput received and processed at the site. However, considering that site operations would continue as under existing conditions, there would be no substantive increase in the volume of PFAS compounds that are present at the Project site, and little is known regarding transport or exposure risks of PFAS compounds as it relates to metal recycling. In addition, the facility would be required to adhere to any applicable regulatory changes that may become applicable to site operations as agencies such as the EPA and RWQCB implement their roadmap to regulation of PFAS. The EPA has issued a memo to proactively use its CWA permitting authorities to reduce discharges of PFAS at the source and to obtain more comprehensive monitoring information on potential sources of PFAS (EPA 2023). This strategy is meant to minimize PFAS pollution in surface water as EPA works to set effluent guidelines, develop analytical methods, and issue water quality criteria for PFAS. This memo applies to CWA programs that EPA oversees; EPA plans to issue a

subsequent memo that provides guidance to NPDES permitting authorities on monitoring provisions and analytical methods as well as the use of pollution prevention and BMPs.

Therefore, since the throughput characteristics connected with the Proposed Project's Phase 1 - Continued Operations would not substantively change with the Proposed Project, and the continued compliance with regulatory requirements including the NPDES Industrial General Permit as well as any forthcoming regulatory changes, there would be no new significant impacts or more severe impacts beyond those previously studied in the 1996 Certified EIR related to water quality.

Phase 2: Non-operational Restoration

In Phase 2 - Non-operational Restoration, the existing above ground improvements would be demolished and transported off site for recycling or disposal in accordance with a demolition permit issued by the City of Los Angeles and any applicable LAHD requirements. The drainage system would operate throughout demolition activities in accordance with the existing NPDES Industrial General Permit. Demolition of the utilities including the drainage system would follow the removal of demolition debris. Once the demolition debris is removed, 11,000 cubic yards of soil would be excavated from the site in coordination with the LARWQCB as part of the remediation of the site. Excavation and handling of the excavated materials would be done in accordance with regulatory oversight from the LARWQCB that would ensure that measures such as isolation and covering of excavated materials to prevent contact with stormwater runoff would occur. Any applicable requirements related to enforcement measures of the Harbor Toxics TMDL would also apply to the restoration activities at the site to ensure that control of contaminants is incorporated into earthwork activities to protect water and sediment quality of the harbor. The excavated soils would be replaced with certified clean imported fill materials. Ultimately, the restoration of the site would remove existing subsurface contaminants and reduce the source of contamination that is currently adversely affecting groundwater quality. With adherence to LARWQCB oversight requirements, which could include replacement of the existing cap, maintenance requirements, ongoing removal of free phase petroleum, and monitoring activities, the remediation activities would be conducted in a manner that is protective of water quality. Therefore, the Phase 2 - Non-operational Restoration activities of the Proposed Project would be conducted in accordance with regulatory oversight with required measures (e.g., covering stockpiles soils and avoidance of rainy season) that are protective of water quality and ultimately would remove source materials that can adversely affect water quality. As a result, no new significant impacts or substantially more severe potential impacts related to water quality related to decommissioning and restoration activities would occur.

Mitigation Measures Applicable to the Proposed Project

No mitigation measures are needed.

Significance After Mitigation

The Proposed Project would not result in any new significant impacts or in a substantial increase in impacts beyond what was previously identified under Impact HYD-2.

3.5.6.2 Impact HYD-2: Would the Proposed Project risk release of pollutants due to inundation as a result of a flood, tsunami, or seiche hazard?

Findings in the 1996 Certified EIR

The 1996 Certified EIR determined that the 1996 project would not alter the 100-year flood water flow and no adverse impacts related to hydrology parameters would result from implementation of the project. The 1996 Certified EIR did note that the site would be susceptible to tsunami hazards. In addition, the improvements to the stormwater control system would improve onsite drainage and some of the temporary flooding that had occurred at the site during storm events. No significant impacts were identified, and no mitigation was required.

Impacts of the Proposed Project without Mitigation

Phase 1 - Continued Operations

The Proposed Project is located on Terminal Island within POLA. The topography of the site and surrounding area is flat.

As noted above, the Project site is not currently located within a 100-year flood zone. Even so, in the event the site were subject to flooding, there would be no substantive changes to operations under or potential sources of pollutants onsite as a result of implementation of the Proposed Project.

The Project site is located within the tsunami hazard zone and will be subject to future effects of SLR. Los Angeles County has been affected by 9 notable tsunami events dating back to 1927, with the most recent being in 2015, although no damage was reported during that event. The frequency of tsunamis is related to the frequency of the events that cause them, which can be from a seismic event, volcanic activities, or oceanic landslides. Generally, four or five tsunamis occur every year in the Pacific Basin, and those that are most damaging are generated in the Pacific waters off South America rather than in the northern Pacific. A Port Complex (Port of Los Angeles and Port of Long Beach) model that assessed tsunami and seiche scenarios determined that in each case modeled, impacts from a tsunami were equal to or more severe than those from a seiche (Moffatt and Nichol 2007). As a result, the discussion below refers to tsunamis as the worst case of potential impacts.

Phase 1 Continued Operations would not increase the potential for tsunami damage to occur. Under the Proposed Project, the existing operation would continue for 10 years, and no new structures would be constructed that would be subject to damage, including inundation by tsunami.

The Port Complex model also indicates that a reasonable maximum source for future tsunami events within the harbor area would either be a magnitude (M) 7 earthquake on the Santa Catalina Fault or a submarine landslide along the nearby Palos Verdes Peninsula. The tsunami study notes that large offshore earthquakes (M-7.5) in the Port region are very infrequent (Moffatt and Nichol 2007). Based on the seismicity, geodetics, and geology, a large locally generated tsunami from either local seismic activity or a local submarine landslide (a landslide that would transport sediment across the continental shelf and into the deep ocean) would likely not occur more than once every 10,000 years (Moffatt and Nichol 2007). Thus, the probability of a tsunami event large enough to cause inundation of the Project site is highly unlikely given the relatively short-term nature of the Proposed Project's Phase 1, which is limited to the 10 years, the potential for a tsunami to occur during that time frame would be extremely low. In addition, the contaminant sources that would exist at the Project site would be no different than what is already subject to inundation under existing conditions.

As discussed in Section 3.5.2.7 above, the Sea Level Rise Adaptation Study conducted by the Port of Los Angeles in 2018 found the Proposed Project site would remain free of inundation and flooding if the sea level rises by 12 inches by the year 2030 and by 24 inches in the year 2050 as predicted. Therefore, considering that the terms of the Proposed Project are for extending the existing operation of the facility up to 10 years from 2024 to 2034, and the site would remove all contaminant sources during the Phase 2 - Non-operational Restoration Period of the Project (to 2039), the likelihood of inundation of the site due to SLR over the following approximate 10 years of continued operations and 5 years of restoration seems remote. Thus, the potential risk of release of pollutants due to inundation due to SLR would be less than significant.

Considering the relatively short duration of the Phase 1 - Continued Operations and the low probability of a tsunami event large enough to inundate the site, no new or substantially more severe potential significant impacts related to the release of pollutants from inundation would occur.

Seiches are oscillations generated in enclosed bodies of water usually as a result of earthquake related ground shaking. A seiche wave has the potential to overflow the sides of a containing basin to inundate adjacent or downstream areas. However, the Pacific Ocean and San Pedro Bay are not of the nature that would result in a seiche. As a result, no new or substantially more severe potential impacts related to the release of pollutants from inundation from seiche waves would occur.

Phase 2: Non-operational Restoration

The Non-operational Restoration phase of the Proposed Project would also be relatively short (up to 5 years) and would involve the demolition of all structures on site, the excavation of all hazardous soils and the replacement of those soils with certified clean imported soils. As discussed above, the probability of a tsunami event large enough to cause inundation of the Project site during Phase 2 of the Proposed Project is highly unlikely given the relatively short-term nature of the restoration, which is limited to 5 years. The potential for a tsunami to occur during that time frame would be extremely low. In addition, all activities that would be conducted during Phase 2 would be in accordance with regulatory oversight from LARWQCB, which would ultimately ensure that no threat to human health or the environment remains at the site. Required remediation would consider pathways of exposure and human health risks such that all potential sources of contamination at the site would be managed in a manner that would minimize potential contact with tsunami floodwaters or stormwater flows were they to occur. Considering the relatively short duration of the Phase 2 - Non-operational Restoration and the low probability of a tsunami event large enough to inundate the site, no new or substantially more severe significant impacts related to the release of pollutants from inundation would occur.

Mitigation Measures Applicable to the Proposed Project

No mitigation measures are needed.

Significance After Mitigation

The Proposed Project would not result in any new significant impacts or in a substantial increase in impacts beyond what was previously identified under Impact HYD-2.

3.5.6.3 Summary of Impact Determinations

Table 3.5-1 summarizes the Proposed Project's impacts with respect to safety and risk of upset. As presented in Table 3.5-1, the Proposed Project's implementation would not produce any new significant impacts or substantially increase the severity of an impact that was previously analyzed. For each type of potential impact, the table describes the impact, notes the impact determinations, describes any applicable mitigation measures, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table.

Table 3.5-1. Summary Matrix of Potential Impacts and Mitigation Measures for Hazards Associated with the Proposed Project

Environmental Impacts	Impact Determination	Mitigation Measures	Impacts After Mitigation
Impact HAZ-1: Would the Proposed Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	No new or substantially more severe significant impacts would occur	No mitigation is required	No new or substantially more severe significant impacts would occur
Impact HAZ-2: Would the Proposed Project risk release of pollutants due to inundation as a result of a flood, tsunami, or seiche hazard?	No new or substantially more severe significant impacts would occur	No mitigation is required	No new or substantially more severe significant impacts would occur

3.5.6.4 Mitigation Monitoring

The Proposed Project is not expected to substantially increase the frequency or severity of adverse effects related to hydrology or water quality or result in a new significant impact. Therefore, no mitigation is required.

3.5.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the Proposed Project is not expected to substantially increase the frequency or severity of adverse effects related to hydrology or water quality; accordingly, no new significant and unavoidable impacts would occur.