EXECUTIVE SUMMARY

ES.1 Introduction

California crude oil production peaked in 1985 and has declined by 39 percent since 1986; Alaskan crude production peaked in 1988 and has declined 60 percent since that time. These declines are expected to continue. The demand for transportation fuels in southern California, which drives demand for crude oil, continues to rise despite promotion of alternative fuel technologies. Thus, foreign crude imports to southern California have increased. These trends are expected to continue.

Anticipating the importance of liquid bulk and containerized shipping, the Los Angeles Harbor Department (LAHD; also referred to as the "Port of Los Angeles" and "the Port"), the Port of Long Beach, and the United States Army Corps of Engineers (the USACE) conducted a study, termed "The 2020 Plan", between 1981 and 1985 to evaluate the capacity of the San Pedro port complex to accommodate cargo forecasts through the year 2020. The 2020 Plan determined that accommodating the projected increase in throughput would require maximizing the use of all existing port lands and terminals, and construction and operation of approximately 2,400 acres (972 hectares [ha]) of new land for new marine terminals.

In 1992, the Deep Draft Navigation Improvements Project (Deep Draft Project) was proposed to improve existing efficiency and safety problems and to accommodate projected increased cargo throughput at the Port consistent with the planning priority laid out in the 2020 Plan. The Deep Draft Project envisioned three uses for Pier 400: 1) an area to relocate existing hazardous bulk facilities away from populated and sensitive use areas; 2) a site for a 150-acre (61-ha) container terminal; and 3) a site for a new deep-draft liquid bulk marine terminal. The USACE and the LAHD prepared the *Deep Draft Navigation Improvements, Los Angeles and Long Beach Harbors, San Pedro Bay, California Final Environmental Impact Statement and Environmental Impact Report* (Deep Draft FEIS/FEIR) (USACE and LAHD 1992) to analyze potential environmental impacts associated with the Deep Draft Project. The LAHD approved the Deep Draft FEIS/FEIR on November 18, 1992, and the USACE issued a Record of Decision (ROD) on January 21, 1994.

Circumstances have changed since approval of the Deep Draft FEIS/FEIR. However, the -81 foot (ft) (24.7 meter [m]) mean lower low water (MLLW) channel leading from the ocean to Pier 400, which was dredged specifically for deep-draft vessel

operations, remains unutilized for its original purpose because no crude oil terminal has been constructed on Pier 400. The Proposed Pacific Los Angeles Marine Terminal Crude Oil Marine Terminal, Tank Farm Facilities, and Pipelines Project (proposed Project) located on Pier 400 in the Port of Los Angeles, would fill this need for a deep-draft crude oil terminal within the Port, consistent with the original use of Pier 400 envisioned in the Deep Draft FEIS/FEIR. The applicant for the proposed Project is Pacific L.A. Marine Terminal LLC (PLAMT), which is a wholly-owned subsidiary of Plains All American Pipeline, L.P. (Plains).

Although the proposed Project is consistent with the Deep Draft FEIS/FEIR, the changed environmental and regulatory circumstances and the changed configuration of the current proposed Project from the marine terminal configuration proposed in 1992 have necessitated the preparation of a Supplemental EIS and Subsequent EIR (SEIS/SEIR) to identify and evaluate the potential environmental impacts associated with implementation of the proposed Project.

The USACE is the federal lead agency responsible for preparation of the SEIS portions of this document. The LAHD is the state lead agency responsible for preparation of the SEIR portions of this document. The USACE and the LAHD have agreed to prepare this Draft SEIS/SEIR jointly for the sake of efficiency and to avoid duplication of effort.

This document supplements the Deep Draft FEIS/FEIR, which is herein incorporated by reference on a selective basis (as it applies to this Project), and relevant elements of that Project are provided in Section 2.5, Alternatives. The text of this Draft SEIS/SEIR is deemed to take precedence in case of any conflicting statements concerning existing setting, Project description, and impacts.

This Draft SEIS/SEIR has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] 4341 *et seq*.), and in conformance with the Council for Environmental Quality (CEQ) Guidelines and the USACE NEPA Implementing Regulations. The document also fulfills the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 *et seq*.), and the State CEQA Guidelines (14 California Code of Regulations [CCR] §15000 *et seq*.).

ES.2 Purpose of This Draft SEIS/SEIR

This Draft SEIS/SEIR will be used to inform decision-makers and the public about the potential significant environmental effects of the proposed Project and selected alternatives. Section 1.3 describes the agencies that are expected to use this document, including the lead, responsible, and trustee agencies under NEPA and CEQA. Section 1.4 describes the scope and content required of an SEIS/SEIR, and Section 1.5 describes the key principles guiding the preparation of this document.

As part of the Draft EIS/EIR process, the USACE and the Port will receive public comment on the proposed Project, Alternatives, impacts and mitigations. The Port will evaluate the feasibility of additional mitigation measures, including increased Alternative Marine Power (AMP) as part of the Final SEIS/SEIR. In certifying the

Final SEIR, the Board of Harbor Commissioners must also approve a Findings of Fact, which would determine the final feasibility of all mitigation measures. If increased participation rates are found to be feasible, the Board could increase the rates as part of their approval.

ES.2.1 NEPA (USACE) Introduction

This SEIS is being prepared by the USACE in compliance with NEPA and CEQA regulations for implementing NEPA (40 CFR 1500-1508), which require the evaluation of potential environmental impacts resulting from federal actions. The primary federal action associated with the proposed Project is the issuance of a permit authorizing work and structures in navigable waters of the United States (U.S.) and the discharge of dredged and fill material in waters of the U.S. The USACE has jurisdictional authority over the Project pursuant to Section 404 of the Clean Water Act, Section 10 of the River and Harbor Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act.

The USACE will use this document in its consideration of an application submitted by the LAHD for a permit to conduct dredge and fill activities and construct wharves in accordance with Section 404 of the Clean Water Act and Section 10 of the River and Harbor Act. In addition, any proposed transportation of dredged material for ocean disposal would be evaluated pursuant to Section 103 of the Marine Protection, Research, and Sanctuaries Act. This action may result in significant effects on the environment, thus constituting a major federal action requiring NEPA review (42 U.S.C. 4341 *et seq*.). This document is not serving as a public notice of application for any permit at this time. Rather, such public notice will be separate from and concurrent with the public review period for this Draft SEIS/SEIR. Additional information on the USACE's role, jurisdiction, and responsibilities with regard to this document and the proposed Project and alternatives is presented in Sections 1.1.1, 1.2.1, 1.4.2, and 2.6.1.

ES.2.2 CEQA (LAHD) Introduction

The LAHD operates the Port under the legal mandates of the Port of Los Angeles Tidelands Trust (Los Angeles City Charter, Article VI, Sec. 601) and the Coastal Act (PRC Div 20 S30700 et seq.), which identify the Port and its facilities as a primary economic/coastal resource of the State and an essential element of the national maritime industry for promotion of commerce, navigation, fisheries, recreation, and harbor operations. According to the Tidelands Trust, Port-related activities should be water dependent and should give highest priority to navigation, shipping and necessary support and access facilities to accommodate the demands of foreign and domestic waterborne commerce.

According to Section 15121(a) of the CEQA Guidelines (CCR, Title 14, Division 6, Chapter 3), the purpose of an EIR is to serve as an informational document that:

> *"…will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."*

The actions under consideration by the LAHD involve physical changes to the environment that would have a potential for significant impact, as determined in the Initial Study of the Project (see Appendix A). In addition, comments provided by public agencies, including responsible and trustee agencies, and the public in response to the Notice of Intent/Notice of Preparation (NOI/NOP) have also indicated that the Project may have significant impacts. Accordingly, an EIR pursuant to CEQA (PRC 21000 *et seq*.) is required. This Draft SEIR evaluates the direct, indirect, and cumulative impacts of the proposed Project in accordance with the provisions set forth in the CEQA Guidelines. It will be used to address potentially significant environmental issues.

The primary intended use of this Draft SEIS/SEIR by the LAHD is to inform agencies considering permit applications and other actions required to construct, lease, and operate the selected alternative and to inform the public of the potential environmental consequences of the proposed action and alternatives. The LAHD's certification of the SEIR, Notice of Completion (NOC), and Statement of Overriding Considerations (if necessary) will document the LAHD's decision as to the adequacy of the SEIR and will inform subsequent decisions by the LAHD whether to approve the proposed Project, construct the in-water elements, lease the Project site to Pacific Los Angeles Marine terminal for a 30-year period, and grant the necessary construction and operating permits. The LAHD would use this SEIS/EIR to support permit applications, construction contracts, the lease, and other actions required to implement the selected alternative and to adopt mitigation measures that, where possible, could reduce or eliminate significant environmental impacts.

The LAHD could also use this Draft SEIS/SEIR to certify on behalf of the California Coastal Commission that the proposed Project is consistent with its Coastal Development Permit.

Other agencies (federal, state, regional, and local) that have jurisdiction over some part of the Project or a resource area affected by the Project are expected to utilize this Draft SEIS/SEIR as part of their approval or permit processes.

ES.2.3 Project Purpose

The purpose of the proposed Project is to help accommodate the projected increase in demand for foreign crude oil to be imported into southern California while mitigating the impacts of that activity on the local environment and the Los Angeles region through adoption of all feasible mitigation measures and by implementing the San Pedro Bay Ports Clean Air Action Plan (CAAP). This purpose requires completing the environmental documentation to assess potential impacts of the proposed improvements (the proposed Project) and feasible alternatives.

The USACE and the LAHD base the need for the proposed Project on the following four current conditions: (1) the need to accommodate increasing foreign crude oil imports to offset declining domestic production; (2) a trend toward larger vessels and larger cargo sizes; (3) a projected shortfall in crude oil vessel berthing capacity at the San Pedro Bay Ports; and (4) increased need for crude oil tank capacity for efficient

offloading of vessels at berth. Each of these needs is discussed in detail in Chapter 1 (Section 1.1.3).

ES.2.3.1 CEQA Project Objectives

The LAHD's project purpose under CEQA is described in Section 1.1.3 and 2.3. To establish and maximize the Port's crude oil handling efficiency and capacity, the following key Project objectives must be accomplished:

- Construct a crude oil marine terminal capable of accommodating deep-draft VLCC tankers, i.e., tankers up to 325,000 DWT or 2,300,000-bbl capacity and construct associated infrastructure capacity that would efficiently accommodate a portion of the forecasted increases in demand for crude oil to be shipped to southern California by sea, while maximizing the use of deep-water facilities created for the purpose by the Deep-Draft Navigation Improvements Project and integrating into the Port's overall utilization of available shoreline. The project objective would be accomplished by:
  - Providing needed crude oil marine terminal accessory buildings and structures to support efficient crude oil unloading and handling requirements;
  - Providing unloading capabilities to promote direct transfer of crude oil from ship to pipeline; and
  - Providing access to land-based tanks and new and existing pipeline systems to transport crude oil to refineries for processing.

ES.2.3.2 NEPA Purpose

The discussion of future crude oil demand and the need for additional facilities to accommodate that demand presented in Section 1.1.3 form the basis for the NEPA purpose and need. As discussed, the proposed Project would meet a public need for infrastructure development for the importation of crude oil. Per NEPA, the purpose of the proposed Project is to construct a crude oil marine terminal on Pier 400 at Berth 408, and related transfer facilities, to receive, store, and convey part of the forecasted increases in the volume of crude oil that will be shipped to southern California by sea. The USACE project purpose and need includes the following objectives:

- Construct and operate a crude oil terminal that maximizes the use of available shoreline and the existing deep-draft waterways created for the purpose by the Deep-Draft Navigation Improvements Project;
- Construct sufficient berthing and infrastructure capacity to accommodate a portion of the foreseeable volumes of crude oil expected to enter southern California from foreign sources and to ensure the efficient offloading of VLCCs;
- Provide the terminal accessory buildings and structures to support the anticipated crude oil handling requirements.

Pursuant to the Clean Water Act (CWA) Section 404(b)(1) Guidelines, the basic purpose is importation of crude oil; and the overall purpose of the proposed Project is to construct a crude oil marine terminal on Pier 400 at Berth 408, and related transfer facilities, to receive, store, and convey part of the forecasted increases in the volume of crude oil that will be shipped to southern California by sea.

ES.2.4 Baselines

ES.2.4.1 CEQA Baseline

Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of a project that exist at the time of the NOP. These environmental conditions would normally constitute the baseline physical conditions by which the CEQA lead agency determines whether an impact is significant. For purposes of this Draft SEIS/SEIR, the CEQA Baseline for determining the significance of potential impacts under CEQA is the conditions that existed at the time the LAHD issued the NOP, i.e., June 2004. At that time, the proposed marine terminal consisted of 5.0 acres (2.0 ha) of vacant land, and the area for pipeline segments consisted of industrial, primarily port-related activity. The area proposed as Tank Farm Site 1 in this Draft SEIS/SEIR consisted of 10.7 acres (4.3 ha) of vacant land, and the area proposed as Tank Farm Site 2 consisted of 37.0 acres (14.8 ha) of land formerly used by Los Angeles Export Terminal, Inc. (LAXT) as a dry bulk terminal.

The CEQA Baseline represents the setting at a fixed point in time, with no project growth over time, and differs from the "No Federal Action/No Project" Alternative in that the No Federal Action/No Project Alternative addresses what is likely to happen at the site over time, starting from the baseline conditions. The No Federal Action/No Project Alternative allows for growth at the proposed Project site that would occur without any required additional approvals. See Sections 1.5.5 and 2.6.2 for a fuller description of the CEQA Baseline.

ES.2.4.2 NEPA Baseline

For purposes of this Draft SEIS/SEIR, the evaluation of significance under NEPA is defined by comparing the proposed Project or other alternative to the No Federal Action scenario (i.e., the NEPA Baseline and No Federal Action Alternative are equivalent for this project). Unlike the CEQA Baseline, which is defined by conditions at a point in time, the NEPA Baseline/No Federal Action is not bound by statute to a "flat" or "no growth" scenario; therefore, the USACE may project increases in operations over the life of a project to properly analyze the NEPA Baseline/No Federal Action condition. Activities that require permits (e.g., those activities within the USACE's jurisdiction under Section 10 of the River and Harbor Act, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act) are not part of the NEPA Baseline. See Sections 1.5.5 and 2.6.1 for a fuller description of the NEPA Baseline.

The NEPA Baseline condition for determining significance of impacts is defined by examining the full range of construction and operational activities that are likely to occur without a permit from the USACE. As documented in Section 2.6.1, the USACE, the LAHD, and the applicant have concluded that no part of the proposed Project would be built absent a USACE permit. Thus, for the case of this project, the NEPA Baseline is identical to the No Federal Action/No Project Alternative (see Section 2.6.1). Elements of the NEPA Baseline include:

- Paving, lighting, fencing, and construction of an access road at Tank Farm Site 1 to allow intermittent temporary storage of chassis-mounted containers on the site by APM;
- Paving, fencing, and lighting at Tank Farm Site 2 to allow intermittent temporary wheeled container storage by APL or Evergreen; and
- Additional crude oil deliveries at existing crude oil terminals in the San Pedro Bay Ports.

Significance of the proposed Project or alternative is defined by comparing the proposed Project or alternative to the NEPA Baseline (i.e., the increment). Impacts are determined by comparing conditions with and without the proposed Project at given points in the future. For the analysis in this Draft SEIS/SEIR, those points include the start of operation of the proposed Project in 2010; intermediate years 2015 and 2025; and 2040, which is the final year in the proposed 30-year lease between the applicant and the LAHD (see Section ES.3).

ES.3 Proposed Project

ES.3.1 Overview

The proposed Project (marine terminal, tank farms, and pipelines) area would be located at Piers 400 and 300 in the Port, approximately 20 miles (32 km) south of downtown Los Angeles. Pier 400 is bordered on the east by the Port of Long Beach Outer Harbor and on the south and west by the Port Outer Harbor (Figure ES-1). Pier 300 is located across the harbor waters to the north and west of Pier 400. Other than pipeline routes, the portion of the proposed Project on Pier 300 of Terminal Island is bounded by Ferry Street, Terminal Way, Seaside Avenue, and Navy Way. Most of the portions outside the Port would be within property owned by the Ultramar/Valero refinery or within road or railway rights-of-way in the City of Los Angeles; a small portion would be within the City of Long Beach.

The proposed Project is to construct and operate a deep-water crude oil marine offloading facility at Berth 408 on Face C of Pier 400 (Marine Terminal); a tank farm containing two storage/transfer tanks, a surge tank, a fuel tank, and related equipment on Face D of Pier 400 (Tank Farm Site 1); a tank farm on Pier 300 in the Port containing fourteen storage/transfer tanks (Tank Farm Site 2); and pipelines that would connect the Marine Terminal to the tank farm sites and both the ExxonMobil Southwest Terminal on Terminal Island and the Ultramar/Valero Refinery located north of the Terminal Island Freeway and south of Anaheim Street. The proposed Project includes a 30-year lease and would involve approximately 30 months of construction. The proposed Marine

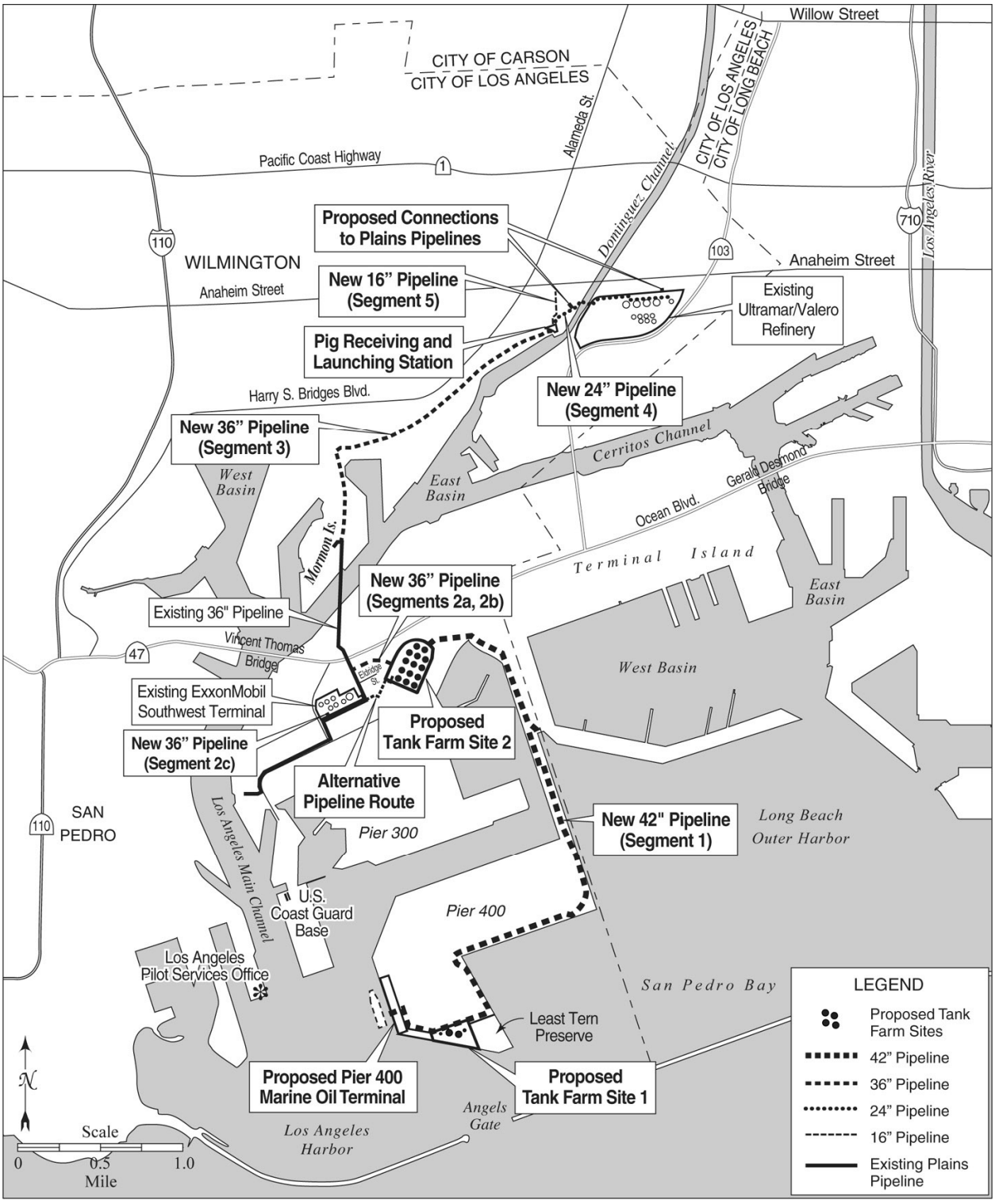

Figure ES-1. Proposed Project Site Locations

Terminal would be located on approximately 5.0 acres (2.0 ha) of vacant land; Tank Farm Site 1 would be located on approximately 10.7 acres (4.2 ha) of vacant land; Tank Farm Site 2 would be located on approximately 37.0 (15.3 ha) of land previously used by LAXT as a dry bulk terminal; and various pipeline segments with a total length of approximately 46,550 ft (14,200 m).

At full operation, expected to occur by 2025, the proposed terminal would utilize a crude oil tank capacity of 4.0 million bbl with an average crude oil throughput of 677,000 barrels per day (bpd) and 201 tanker calls per year.

Major elements of the proposed Project are shown in Figure ES-2 and summarized in Table ES-1, and include construction and operation of the following:

- A new crude oil Marine Terminal on the west (Face C) side of Pier 400, including a wharf at Berth 408, loading/unloading arms, a control building, an administration building, a terminal security office, parking facility, shipping pumps, a fire suppression system, and an electrical sub-station;
- A new tank farm facility (Tank Farm Site 1) with a 50,000-bbl surge tank, a 15,000-bbl fuel tank, two 250,000-bbl capacity crude oil transfer tanks, a vapor tank, and a motor control building, on Face D of Pier 400;
- A new tank farm facility (Tank Farm Site 2) with fourteen 250,000-bbl capacity crude oil transfer tanks, a motor control center, tank farm operator office and control building, and parking facilities;
- A 1.2 acre (0.5 ha) pig launching facility (Site A) (note that Site B, an 0.61 acre (0.25 ha) site, would be used in the event that Site A is unavailable at the time of proposed Project construction; Site B is located directly east of Henry Ford Avenue, south of Anaheim Street, and west of the Air Products facility);
- A 42-inch offload pipeline (Pipeline Segment 1) connecting the Marine Terminal to Tank Farm Site 1 and Tank Farm Site 2;
- Two 36-inch delivery pipelines (Pipeline Segments 2a and 2b) connecting Tank Farm Site 2 to an existing, 36-inch pipeline located in Ferry Street on Terminal Island;
- A 36-inch delivery pipeline (Pipeline Segment 2c) connecting the existing 36-inch pipeline to ExxonMobil Southwest Facility;
- A 36-inch delivery pipeline (Pipeline Segment 3) connecting the existing 36-inch pipeline on Mormon Island to Site A (or Site B);
- A 24-inch delivery pipeline (Pipeline Segment 4) connecting Site A (or Site B) to the Ultramar/Valero Refinery and other Plains pipelines and other customer pipelines located east of the Terminal Island Freeway.
- A 16-inch delivery pipeline (Pipeline Segment 5) connecting Site A (or Site B) to the existing Plains pipeline located in Henry Ford Avenue near the corner of Alameda and Henry Ford Avenue.

Table ES-1. Summary of Proposed Project and Baselines

Element	*CEQA Baseline*	*NEPA Baseline*		*Proposed Project*	
	2004	*2010*	*2025 - 2040*	*2010*	*2025 – 2040*
OPERATIONS					
Marine Terminal Acreage	0	0	0	5.0 acres (2.0 ha)	5.0 acres (2.0 ha)
New Tank Farm Acreage	0	0	0	47.7 acres (19.3 ha)	47.7 acres (19.3 ha)
New Storage Tanks	0	0	0	16	16
Total New Tank Capacity	0	0	0	4.0 million bbl	4.0 million bbl
Barge Calls at Berth 408	0	0	0	6	12
Tanker Calls at Berth 408 (Incremental over 2004)	0	0	0	129 per year	201 per year
Average Crude Oil Throughput at Berth 408 (Incremental over 2004)[1]	0	0	0	350,000 bpd	677,000 bpd
Tanker Calls at Existing Terminals in San Pedro Bay Ports (Incremental over 2004)	0	267 per year	267 per year	0	0
Average Crude Oil Throughput at Existing Terminals in San Pedro Bay Ports (Incremental over 2004)	0	252,000 bpd	252,000 bpd	0	0
Employee Estimates	0	0	0	523 [2]	54 [3]

Notes:

1 For the proposed Project, the environmental analysis uses the assumption that every new barrel of crude oil (compared to 2004 demand) demanded by southern California refineries would be received at the new Berth 408. This may not occur in practice, as competition will continue among marine oil terminals to bring in oil imports and deliver them to area refineries. However, the assumption provides for a conservative analysis of reasonably foreseeable environmental impacts.

2 The peak number shown represents peak employment during the construction phase (taking into account that operations would start in 2010 while construction is ongoing); see Section 2.4.3.1 for details. This peak level would occur for only a brief time period, if at all, but is the highest reasonably foreseeable number.

3 The number of employees during operation of the proposed Project includes those employed or contracted by PLAMT as well as the estimated increase in tugboat and Port pilot crews due to increased vessel calls.

bpd = barrels per day

bbl = barrels

ES.3.2 Project Description

The specific elements of the proposed Project are described in greater detail in Section 2.4.

ES.3.2.1 Marine Terminal

The Marine Terminal would be built on a 5-acre (2 ha) parcel located at Berth 408 on the southwest portion of Pier 400. Berth 408's current water depth of 81 ft (24.7 m) below mean low lower water (MLLW) would remain unchanged. Berth structures would be designed and constructed to accommodate VLCC tankers. The berth would be designed to offload crude oil at up to 125,000 barrels per hour (bph).

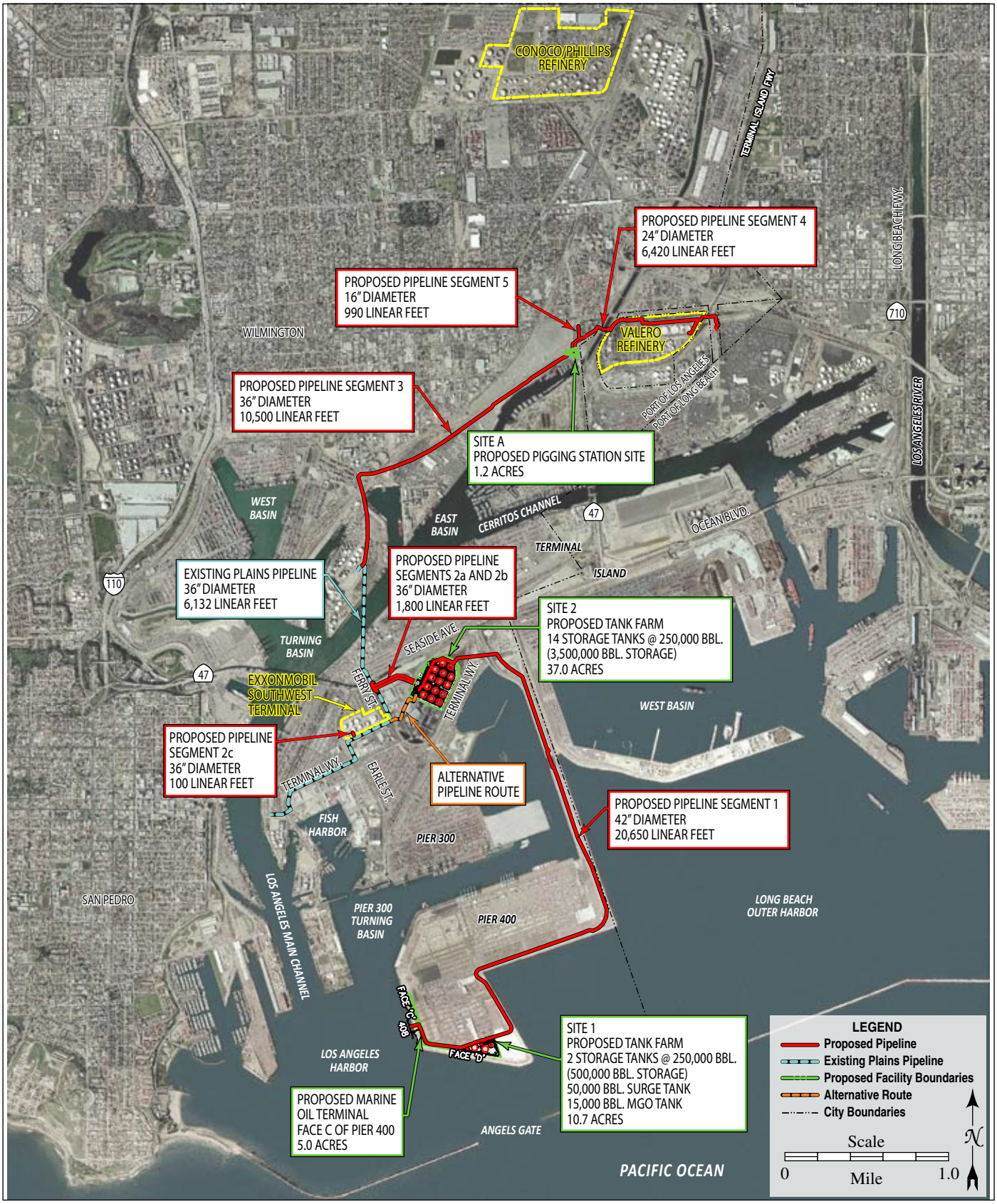

Figure ES-2. Proposed Project Site Locations (Aerial View)

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The Marine Terminal would be equipped with an Alternative Marine Power (AMP) system to reduce air emissions. Subject to the requirements summarized in Section 3.2 (Mitigation Measure AQ-19), another technology for emissions reduction may eventually be used as an alternative to AMP. One such technology is the Advanced Cleanup Technologies, Inc. (ACTI) Advanced Maritime Emissions Control System (AMECS). To facilitate its eventual implementation should AMECS be determined to be usable at Berth 408, the proposed Project includes construction of the support infrastructure for AMECS (i.e., a pile-supported platform and approach). More details about the AMECS, its evaluation for inclusion in the proposed Project, and its potential for eventual use at Berth 408 are provided in Section 2.4.2.1. Installation of AMECS would require separate environmental analysis if added in the future.

The use of AMP constitutes a mitigation measure rather than a feature of the proposed Project. However, the construction of the platform on the berthing structure that would support AMP as well as conduits, utility connections, and general infrastructure needed for operation of an AMP system would be installed as part of the proposed Project during construction of the Marine Terminal. The power substation and dockside cable handling gear would be constructed as soon as tankers become available that could utilize the AMP system. These elements of are part of the AMP implementation and thus considered part of the AMP mitigation measure rather than part of the proposed Project.

The berth would include an unloading platform; breasting dolphin platforms; a mooring and fendering system; and north and south trestles with roadways, pipeways, walkways, a floating utility boat dock, and a gangway tower; and platforms to support the AMP and AMECS facilities. The berth would also include six mooring dolphins with quick release hooks and power capstans, an electric motor-driven derrick cargo crane, a davit crane (boat lowering crane), 4,000 ft (1,219 m) of spill boom storage, a foam-based remotely operated firefighting system, low-impact area lighting systems, cathodic protection corrosion prevention systems, and navigational lighting systems.

Three buildings are proposed for construction at the Marine Terminal: terminal control, administration, and security buildings. These will all be certified in the Leadership in Energy and Environmental Design (LEED) standards established by the U.S. Green Building Council. Other landside elements of the Marine Terminal would include a firefighting system, pumping systems for oil and water, and the electrical system.

The structural elements of the Marine Terminal would be designed for a service life of 50 years, with no significant maintenance to structural elements due to deterioration during the first 25 years. Equipment such as unloading arms, pumps, and generators would be designed for a service life of at least 30 years, consistent with the term of the proposed lease. However, routine maintenance activities, cathodic protection systems, and a thorough inspection and repair program would be expected to extend the service life well beyond 50 and 30 years.

ES.3.2.2 Tank Farms

Tank Farm Site 1 would be located on the southern side (Face D) of Pier 400 on 10.7 acres (4.2 ha) of land that is currently vacant, unpaved, and ungraded and would receive direct offloads of crude oil. The site is owned by the LAHD and is adjacent to the APM Terminal to the north and west, a California Least Tern nesting preserve to the east, and the Los Angeles Harbor to the south and west.

An approximately 4,800-square foot (sf) (446-square meters [m^2]), single or two-story motor control center building would be installed at Tank Farm Site 1. This building would contain the electrical switchgear, low voltage step down transformers, and the motor control center that would service all electrical equipment.

Tank Farm Site 2 would be located on approximately 37.0 acres (15.3 ha) south of Seaside Avenue and west of Terminal Way and would provide temporary storage and transfer of crude oil and partially refined crude oil. The two tank farms would have a total crude oil storage capacity of 4.0 million bbl as well as an addition to a 50,000 bbl surge tank and a 15,000 bbl marine gas oil (MGO) tank that would provide MGO to vessels using the marine terminal. In the late 1990s, LAXT constructed on the site a dry bulk terminal, including structures for the handling and export of petroleum coke. However, the LAHD now has full jurisdiction over the site, and LAXT no longer has any entitlement to the site. Under a separate project, the LAHD is in the process of demolishing two domes and a storage shed on the site; the existing rail tracks adjacent to the site will continue to operate. The future use of the site is expected to be for liquid bulk storage (either for the proposed Project or for some future, as yet unknown project).

Tank Farm Site 2 would include one 15,000 sf (1,392 m^2), two-story building to house a motor control center and an office/control center. The building would also include worker change rooms, restrooms, a lunchroom, and worker training and briefing facilities.

ES.3.2.3 Pipelines

The general locations of each of the pipeline routes are shown in Figure ES-1. The proposed Project pipeline route would start with a 42-inch diameter pipeline (Segment 1) that would run from the Marine Terminal to the northern boundary of Tank Farm Site 1, and then along the southern edge of Pier 400 and on the Pier 400 Causeway to Tank Farm Site 2. Two 36-inch diameter pipelines (Segments 2a and 2b) would connect Tank Farm Site 2 to the existing network of pipelines at Ferry Street. In addition, another 36-inch diameter spur (Segment 2c) would run from the existing network at Ferry Street into the ExxonMobil Southwest Terminal.

The applicant has acquired entitlements to use the existing 36-inch diameter pipelines from near Seaside Avenue on Terminal Island to the area of Berth 174 on Mormon Island. A new, directionally-drilled, 36-inch diameter pipeline (Segment 3) would run from Berth 174 to the northern end of Mormon Island and from there to Site A. Site A is a proposed pig launching station which encompasses about 1.2 acres and would be located directly west of Henry Ford Avenue, west of the Air Products

facility. This site would be used as a transition point for connections to an existing 16-inch diameter Pacific Pipeline that extends to the ConocoPhillips Carson Refinery (via Proposed Pipeline Segment 5) and a new 24-inch diameter pipeline (Proposed Pipeline Segment 4) that extends to the Valero/Ultramar Wilmington Refinery and Valero Refineries, as well as connections to existing pipeline systems owned by Plains on the east side of the Terminal Island Freeway. As noted above, should Site A be unavailable, the new pigging station would be sited at an alternative location, called Site B; if used instead of Site A, Site B would be used as a transition point for connections to the same set of new and existing pipelines as noted above for Site A.

In general, the pipelines would traverse land use areas of the Port that have been used for industrial, port-related activity or military activity. A few exceptions would occur where small portions of the pipeline routes traverse non-Port property. Portions of the pipeline route, and the termini of the new pipelines at the Ultramar/Valero Refinery and connections into other Plains pipeline systems, would extend outside of Port-controlled property. Most of the portions outside the Port would be within property owned by the Ultramar/Valero refinery or within road or railway rights-of-way in the City of Los Angeles; a small portion would be within the City of Long Beach. All pipelines would be installed belowground, with the exception of the water crossings at the Pier 400 causeway bridge, at the pig receiving and launching station, at the Valero pipe bridge that crosses the Dominguez Channel west of the Ultramar/Valero Refinery, and within parts of the Marine Terminal and Tank Farm Sites.

ES.3.2.4 Project Operations

Project operations are described in detail in Section 2.4.4. The completed Marine Terminal could handle an average daily throughput of 677,000 bpd and a total crude oil tank capacity of 4.0 million bbl. That maximum capacity is expected to be reached by 2025 (Table ES-1).

The proposed Project is expected to begin vessel-unloading operations in 2010 with the first full year of operations expected in 2011. The operation of tanker vessels is described in Section 1.1.4. Since the proposed Project entails construction of one berth, only one vessel could be berthed at the terminal at any one time. At maximum capacity the terminal would experience approximately 201 tanker calls per year by 2025.

Marine Terminal operation would consist primarily of managing the flow of crude oil from the tankers; managing the vessel fuel transfer and storage; monitoring the unloading systems for leaks of oil or hydrocarbon vapors; and managing the spill detection and containment, fire suppression, oily water treatment, and storm water systems described in Section 2.4.2.

Tank farm operations would consist of managing the storage of crude oil, oily water (from the sumps and containment areas), and vessel fuel in the tanks; monitoring and maintaining the various control systems (leaks, vapor, storm water); and monitoring and maintaining the tanks, pumps, manifolds, and piping in the tank farms. The operations would be monitored and controlled from the Marine Terminal Control Building, but routine inspection and maintenance would take place on site.

Pipeline operations would include monitoring and inspecting the pipelines, including the valves, the leak detection, pressure detection, and corrosion prevention systems, conducting periodic hydrostatic testing, and conducting periodic cleaning.

ES.4 Alternatives to the Project

ES.4.1 Basis of the Alternatives

As described more fully in Section 2.5, NEPA and the CEQA Guidelines require that an SEIS and an SEIR describe a range of reasonable alternatives to the Project that could feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any significant environmental impacts. The SEIS/SEIR should briefly describe the rationale for selection and rejection of alternatives, compare the merits of the alternatives, and determine an environmentally superior alternative.

The lead agencies may make an initial determination as to which alternatives are feasible and therefore merit in-depth consideration, and which alternatives are infeasible. The range of alternatives need not be beyond a reasonable range necessary to permit a reasoned choice between the alternatives and the Project.

ES.4.2 Alternatives Considered

A wide array of alternatives, including the Reduced Project Alternative and the No Federal Action/Project Alternative, were considered and evaluated in regards to how well each met the objectives for the proposed Project. The Reduced Project Alternative meets most of the Project objectives and is fully evaluated in this document (see Section ES.4.3 for a summary of the evaluation). Both CEQA and NEPA also require consideration of a No Project Alternative (also fully evaluated in this document; see Section ES.4.3 for a summary of the evaluation), although this alternative does not meet the Project objectives. These two alternatives are evaluated co-equally with the proposed Project for all environmental resources in Chapter 3 in this Draft SEIS/SEIR. Chapter 6 (as summarized in Section ES.5.4) compares the proposed Project and these two alternatives and identifies the environmentally preferred and environmentally superior alternative.

ES.4.3 Alternatives Analyzed in This Draft SEIS/SEIR

The two alternatives considered co-equally in this Draft SEIS/SEIR are: 1) No Federal Action/No Project Alternative and 2) the Reduced Project Alternative. Table ES-2 summarizes the key features of the proposed Project and its alternatives. Chapter 2 contains a more detailed discussion of these alternatives.

Table ES-2. Summary of Proposed Project and Alternatives in 2040

	Marine Terminal Acres	*Tank Farm Acres*	*Annual Tanker Calls at Berth 408*	*Average Daily Crude Oil Throughput at Berth 408 (barrels per day [bpd])*	*Increase in Annual Tanker Calls at Other Existing Berths in the San Pedro Bay Ports*	*Total New Tank Capacity (barrels [bbl])*	*Operational Employee Estimates at Berth 408*
Proposed Project	5.0	47.7	201 [2]	677,000	0 [3]	4.0 million	54 [5]
No Federal Action/No Project Alternative	0	0	0	0	267 [4]	0	0
Reduced Project Alternative	5.0	47.7	132 [2]	450,000	240 [4]	4.0 million	61 [5]

Notes:

1 This table summarizes the major features of the proposed Project and alternatives.

2 The number of tanker calls at Berth 408 depends on crude oil supply sources and vessel availability and, for the Reduced Project Alternative only, the lease cap that would be imposed as part of that alternative. The estimates shown here are based upon projections of the world tanker fleet and terminal throughput from Baker & O'Brien (2007), and represent the highest reasonably foreseeable number of tanker calls for the proposed Project and the Reduced Project Alternative. (See Chapter 2, especially Table 2-1, Table 2-9, Table 2-12, and Table 2-13, for additional details, and see Appendix D1 for detailed calculations used to derive the estimates.) These highest reasonably foreseeable numbers are assumed in the impact analysis in this SEIS/SEIR in order to capture all potential impacts. A higher proportion of large vessels carrying larger loads would mean fewer vessel calls per year. Note that an emissions cap would be imposed in the South Coast Air Quality Management District (SCAQMD) operating permit, as described in Section 3.2 Air Quality. The actual number of tanker calls per year would be limited to comply with the SCAQMD permit condition; however, this SEIS/SEIR does not incorporate this limitation (in order to capture all potential impacts).

3 For the proposed Project, the environmental analysis uses the assumption that every new barrel of crude oil demanded by southern California refineries would be received at the new Berth 408. This may not occur in practice, as competition will continue among marine oil terminals to bring in oil imports and deliver them to area refineries. However, the assumption provides for a conservative analysis of reasonably foreseeable environmental impacts.

4 The number of tanker calls at existing terminals is an estimate based upon projections of the world tanker fleet and excess capacity at other existing terminals. See Section 2.5.2.1 for more information, and refer to Appendix D1 for detailed calculations used to derive the estimates.

5 The number of employees during operation includes those employed or contracted by PLAMT as well as the estimated increase in tugboat and Port pilot crews due to increased vessel calls (including, for the Reduced Project Alternative only, increased vessel calls at existing berths in the San Pedro Bay Ports).

ES.4.3.1 No Federal Action/No Project Alternative

This alternative considers what would reasonably be expected to occur on the site if no LAHD or federal action would occur. The LAHD would not issue any permits or discretionary approvals, and would take no further action to construct and develop additional the Marine Terminal or any aspect of the proposed Project. The USACE would not issue a permit for construction of wharves and pipeline crossings. For this document, the USACE, the LAHD, and the applicant have concluded that absent a USACE permit, it is not foreseeable that any element of the proposed Project would be implemented at the site (see Section 1.5.5.1 and Section 2.6.1). Therefore, for purposes of this document, the No Federal Action Alternative is equivalent to the No Project Alternative. Accordingly, both the No Federal Action Alternative and the No Project Alternative are referred to, jointly, as the No Federal Action/No Project Alternative.

Section 2.5.2.1 describes the No Federal Action/No Project Alternative in detail. Under the No Federal Action/No Project Alternative, proposed Project facilities would not be constructed or operated. The No Federal Action/No Project Alternative considers the only remaining allowable and reasonably foreseeable use of the proposed Project site: Use of the site for temporary storage of wheeled containers on the site of Tank Farm 1 and on Tank Farm Site 2. This use would require paving, construction of access roads, and installation of lighting and perimeter fencing.

In addition, for analysis purposes, under the No Federal Action/No Project Alternative a portion of the increasing demand for crude oil imports is assumed to be accommodated at existing liquid bulk terminals in the San Pedro Bay Ports, to the extent of their remaining capacities. Although additional demand, in excess of the capacity of existing marine terminals to receive it, may come in by rail, barge, or other means, rather than speculate about the specific method by which more crude oil or refined products would enter southern California, for analysis purposes, the impact assessment for the No Federal Action/No Project Alternative in this SEIS/SEIR is based on marine deliveries only up to the available capacity of existing crude oil berths. As described in Section 2.5.2.1, the impact assessment for the No Federal Action/No Project Alternative also assumes existing terminals would eventually comply with the California State Lands Commission (CSLC) Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS), that LAHD and the Port of Long Beach would renew the operating leases for existing marine terminals, and that existing terminals would comply with Clean Air Action Plan (CAAP) measures as of the time of lease renewal (i.e., 2008 for Port of Long Beach Berths 84-87, 2015 for LAHD Berths 238-240, and 2023 for Port of Long Beach Berths 76-78).

Based on berth limits, channel depth, and an engineering analysis of pipeline and storage tank capacity, the LAHD and the USACE estimate the incremental capacity of existing terminals in the San Pedro Bay Ports (compared to crude oil receipts in 2004) at 252,000 bpd of crude oil, and that is the figure assumed as additional throughput to southern California under the No Federal Action/No Project Alternative (for the years in which estimated incremental crude oil demand is at least that amount). Appendix D1 provides additional supporting information and detailed sources for the assumptions used to derive this estimate. To the extent to which the demand exceeds capacity of marine facilities to import crude oil or refined products, additional imports of crude oil may come in by truck, rail, or barge, and additional refined products may come in by vessel, barge, truck, or rail (see Appendix D3). However, rather than speculate about the specific method by which more crude oil or refined products would enter the area, for analysis purposes the impact assessment for the No Federal Action/No Project Alternative in this SEIS/SEIR assumes no discretionary actions by the LAHD, the Port of Long Beach, or other agencies, and is based on imports up to the available capacity of existing crude oil berths.

Note that the NEPA Baseline condition coincides with the No Federal Action/No Project Alternative for this project because the USACE, the LAHD, and the applicant have concluded that, absent a USACE permit, no part of the proposed Project would be built (Section 2.6.1). All elements of the No Federal Action/No Project Alternative are identical to the elements of the NEPA Baseline. Therefore, under a NEPA determination there would be no impact associated with the No Federal Action/No Project Alternative.

ES.4.3.2 Reduced Project Alternative

The Reduced Project Alternative would be identical to the proposed Project in terms of the design, construction, and operation of the Marine Terminal, Tank Farm Sites 1 and 2, Pipeline Segments 1, 2a, 2b, 2c, 3, 4, and 5, and the new pigging station site (either Site A or, if Site A is unavailable, the alternate Site B). However, this alternative involves a lease condition imposed by LAHD that would cap permitted throughput of crude oil received at Berth 408. The lease would allow PLAMT to receive up to 127.75 million bbl in 2010 (average of 350,000 bpd) and up to 164.25 million bbl in 2015 through 2040 (average of 450,000 bpd). For intermediate years (2011-2014), the lease stipulation would allow an amount of throughput based on linear interpolation between the benchmark years.

The Reduced Project Alternative is estimated to receive an annual maximum of 132 new tanker calls at the proposed Marine Terminal based on the reduced throughput. However, under the Reduced Project Alternative approximately 240 new tanker calls (i.e., 240 more than in year 2004) would also occur at other existing berths in the San Pedro Bay Ports in 2040 to accommodate for the increased demand in crude oil in excess of the 450,000 bpd that would be received at Berth 408.

For analysis purposes, the impact assessment for the Reduced Project Alternative assumes existing terminals would eventually comply with the MOTEMS, that the LAHD and the Port of Long Beach would renew the operating leases for existing marine terminals, and that existing terminals would comply with CAAP measures as of the time of lease renewal (i.e., 2008 for Port of Long Beach Berths 84-87, 2015 for LAHD Berths 238-240, and 2023 for Port of Long Beach Berths 76-78).

ES.4.4 Alternatives Eliminated from Further Consideration

The alternatives below were determined to be infeasible and were eliminated from further consideration in this Draft SEIS/SEIR, pursuant to CEQA Guidelines, Section 15126.6. Additional details regarding these alternatives and the reasons for rejecting them are included in Chapter 2, Section 2.5.

- expansion of other crude oil terminals inside the Port;
- use of an existing berth(s) within the Port;
- development of a terminal on a new landfill inside the Port;
- expansion or construction of a terminal outside the Port;
- use of an offshore mooring site (monobuoy) on Terminal Island;
- shipping to the Bay Area and pipelining to southern California;
- constraining the size of vessels that could call at Berth 408;
- alternative storage tank configurations;
- a non-shipping use of the Pier 400 area;

- relocation of existing liquid bulk terminals to Pier 400;
- building a new container terminal on Pier 400;
- building a liquid bulk terminal on Pier 400 for refined products/alternative fuels, instead of crude oil; and
- building a renewable energy facility on Pier 400.

ES.5 Environmental Impacts

The USACE and the LAHD determined that an SEIS/SEIR should be prepared for the proposed Project. The USACE issued an NOI to prepare an EIS on and the LAHD issued an NOP and CEQA Initial Study and Environmental Assessment Checklist for the PLAMT (then Pacific Energy) Crude Oil Marine Terminal and Pipelines Project SEIS/SEIR on June 8, 2004.

This Draft SEIS/SEIR has been prepared to evaluate potentially significant impacts associated with the Project and alternatives, and to evaluate if the Project could result in cumulative impacts with other development projects in the surrounding area. A significant impact is an impact determination under NEPA and CEQA and refers to a substantial or potentially substantial significant change in any of the physical conditions within the area affected by the Project. Mitigation measures have been proposed to reduce or eliminate potentially significant impacts. The level of impact after implementation of mitigation is described as the residual impact.

ES.5.1 Impacts Not Considered in this Draft SEIS/SEIR

The scope of this Draft SEIS/SEIR was established based on the NOI and NOP, which identified potential impact areas of the proposed Project. The NOP also determined that agricultural resources, ground transportation and circulation, land use, recreation, and utilities and public services would not be affected by the proposed Project. In accordance with CEQA and NEPA, certain issues contained in the NOP and Initial Study that have no impact do not require further evaluation in this Draft SEIS/SEIR. However, the LAHD and the USACE determined later that potential impacts to ground transportation and circulation, land use, recreation, utilities and public services, and population and housing should be addressed in the SEIS/SEIR. Impacts to Ground Transportation, Land Use, Recreation, Utilities and Public Services, and Population and Housing are discussed in Section 3.6, Section 3.8, Section 3.11, Section 3.13, and Section 3.15 of Chapter 3, respectively. Agricultural Resources are not evaluated in this Draft SEIS/SEIR.

ES.5.2 Impacts of the Proposed Project

Based on the NOI, NOP, and the scoping process for this Draft SEIS/SEIR, the following issues have been determined to be potentially significant or are required to be analyzed, and are, therefore, included in this Draft SEIS/SEIR:

- Aesthetics and Visual Resources;
- Air Quality and Meteorology;
- Biological Resources;
- Cultural Resources;
- Geology;
- Groundwater and Soils;
- Marine Transportation;
- Noise;
- Risk of Upset/Hazardous Materials; and
- Water Quality, Sediments, and Oceanography.

In addition, as noted in Section ES.5.1, the LAHD and the USACE determined, subsequent to the NOI, NOP, and scoping process, that potential impacts to ground transportation and circulation, land use, recreation, utilities and public services, and population and housing should also be addressed in the SEIS/SEIR. Sections 3.1 through 3.15 discuss the anticipated potential environmental effects of the proposed Project, the No Project Alternative, and the Reduced Project Alternative. These issues are discussed in each section, and mitigation measures to avoid the impacts or reduce the impacts to a less than significant level are proposed whenever possible. In addition, Chapter 4 addresses the potential environmental effects of the proposed Project in combination with past, present, and reasonably foreseeable future projects within the region of potential effect. Chapter 5, Environmental Justice, evaluates the potential for the proposed Project to result in high and adverse impacts (including cumulative impacts) that disproportionately affect low income and/or minority populations.

Summary descriptions of the significant impacts, mitigation measures, and residual impacts for the proposed Project and alternatives are provided in Table ES-3 (impacts that are less than significant for the proposed Project or any alternative are not shown in the table). This table also presents significant cumulative impact results and environmental justice impact determinations.

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.2 Air Quality				
Proposed Project & Reduced Project Alternative	**AQ-1:** Construction-related emissions would exceed a SCAQMD threshold of significance.	CEQA: **Significant** impact for VOC, CO, NO_x, SO_x, PM_{10} and $PM_{2.5}$ emissions Measured pollutants: VOC, CO, NO_x, SO_x, PM_{10} and $PM_{2.5}$	**MM AQ-1:** Ridesharing or Shuttle Service **MM AQ-2:** Staging Areas and Parking Lots **MM AQ-3:** Construction Equipment Standards **MM AQ-4:** Electricity Use **MM AQ-5:** Best Management Practices **MM AQ-6:** Additional Fugitive Dust Controls **MM AQ-7:** Expanded VSR Program **MM AQ-8:** Low-Sulfur Fuel for Construction Delivery Vessels **MM AQ-9:** Engine Standards for Harbor Craft Used in Construction **MM AQ-10:** Fleet Modernization for On-Road Trucks **MM AQ-11:** Special Precautions near Sensitive Sites **MM AQ-12:** General Mitigation Measure **MM 4G-5:** Discontinue Construction Activities During Stage II Smog Alerts	CEQA: **Significant** and unavoidable impact for VOC, CO, NO_x, PM_{10}, and $PM_{2.5}$ emissions Less than significant impact for SO_x
		NEPA: **Significant** impact for VOC, CO, NO_x, SO_x, PM_{10} and $PM_{2.5}$ emissions Measured pollutants: VOC, CO, NO_x, SO_x, PM_{10} and $PM_{2.5}$	**MM AQ-1** through **MM AQ-12** and **MM 4G-5**	NEPA: **Significant** and unavoidable impact for VOC, CO, NO_x, PM_{10} and $PM_{2.5}$ emissions Less than significant impact for SO_x
No Federal Action/No Project Alternative	**AQ-1:** Construction-related emissions would not exceed a SCAQMD threshold of significance.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: No impact	Mitigation not required	NEPA: No impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.2 Air Quality (continued)				
Proposed Project & Reduced Project Alternative	**AQ-2:** Construction would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance.	CEQA: **Significant** impact for 1-hr and annual NO_2, 24-hr PM_{10}, and 24-hr $PM_{2.5}$ emissions Less than significant impact for all other pollutants Measured pollutants: 1-hr NO_2, annual NO_2, 1-hr CO, 8-hr CO, 24-hr PM_{10}, annual PM_{10}, and 24-hr $PM_{2.5}$	**MM AQ-1** through **MM AQ-12** and **MM 4G-5**	CEQA: **Significant** and unavoidable impact for 1-hr and annual NO_2, 24-hr PM_{10}, and 24-hr $PM_{2.5}$ emissions Less than significant impact for all other pollutants
		NEPA: **Significant** impact for 1-hr and annual NO_2, 24-hr PM_{10}, and 24-hr $PM_{2.5}$ emissions Less than significant impact for all other pollutants Measured pollutants: 1-hr NO_2, annual NO_2, 1-hr CO, 8-hr CO, 24-hr PM_{10}, annual PM_{10}, and 24-hr $PM_{2.5}$	**MM AQ-1** through **MM AQ-12** and **MM 4G-5**	NEPA: **Significant** and unavoidable impact for 1-hr and annual NO_2, 24-hr PM_{10}, and 24-hr $PM_{2.5}$ emissions Less than significant impact for all other pollutants
No Federal Action/No Project Alternative	**AQ-2:** Construction would not result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: No impact	Mitigation not required	NEPA: No impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.2 Air Quality (continued)				
Proposed Project	**AQ-3:** Operational emissions would exceed 10 tons per year of VOCs or a SCAQMD threshold of significance.	CEQA: **Significant** impact for VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$ emissions Measured pollutants: VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$	**MM AQ-13:** Expanded Vessel Speed Reduction Program **MM AQ-14:** Low Sulfur Fuel Use in Main Engines, Auxiliary Engines, and Boilers **MM AQ-15:** Alternative Maritime Power (AMP) **MM AQ-16:** Slide Valves **MM AQ-17:** Parking Configuration **MM AQ-18:** New Vessel Builds **MM AQ-19:** Equivalent Measures **MM AQ-20**: Periodic Review of New Technology and Regulations **MM AQ-21:** Throughput Tracking	CEQA: **Significant** and unavoidable impact for VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$ emissions
		NEPA: **Significant** impact for CO, SO_x, PM, PM_{10}, and $PM_{2.5}$ emissions Less than significant impact for VOC and NO_x emissions Measured pollutants: VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$	**MM AQ-13** through **MM AQ-21**	NEPA: **Significant** and unavoidable impact for CO emissions Less than significant impact for all other pollutants
No Federal Action/No Project Alternative	**AQ-3:** Operational emissions would exceed 10 tons per year of VOCs or a SCAQMD threshold of significance.	CEQA: **Significant** impact for VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$ emissions Measured pollutants: VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$	Mitigation not applicable	CEQA: **Significant** and unavoidable impact for VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$ emissions
		NEPA: No impact	Mitigation not required	NEPA: No impact
Reduced Project Alternative	**AQ-3:** Operational emissions would exceed 10 tons per year of VOCs or a SCAQMD threshold of significance.	CEQA: **Significant** impact for VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$ emissions Measured pollutants: VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$	**MM AQ-13** through **MM AQ-21**	CEQA: **Significant** and unavoidable impact for VOC, CO, NO_x, SO_x, PM, PM_{10}, and $PM_{2.5}$ emissions
		NEPA: **Significant** impact for CO, NO_x, PM, PM_{10}, and $PM_{2.5}$ emissions Less than significant impact for VOC and SO_x emissions Measured pollutants: VOC, CO, NO_x, SO_x, PM, PM_{10} and $PM_{2.5}$	**MM AQ-13** through **MM AQ-21**	NEPA: **Significant** and unavoidable impact for CO and NO_x emissions Less than significant impact for VOC, SO_x, PM, PM_{10} and $PM_{2.5}$ emissions

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.2 Air Quality (continued)				
Proposed Project	**AQ-4:** Operational emissions would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance.	CEQA: **Significant** impact for 1-hr and annual NO_2 Less than significant impact for all other pollutants Measured pollutants: 1-hr NO_2, annual NO_2, 1-hr CO, 8-hr CO, 24-hr PM_{10}, annual PM_{10}, and 24-hr $PM_{2.5}$	**MM AQ-13** through **MM AQ-21**	CEQA: **Significant** and unavoidable impact for annual NO_2 Less than significant impact for all other pollutants
		NEPA: **Significant** impact for 1-hr and annual NO_2 Less than significant impact for all other pollutants Measured pollutants: 1-hr NO_2, annual NO_2, 1-hr CO, 8-hr CO, 24-hr PM_{10}, annual PM_{10}, and 24-hr $PM_{2.5}$	**MM AQ-13** through **MM AQ-21**	NEPA: **Significant** and unavoidable impact for annual NO_2 Less than significant impact for all other pollutants
No Federal Action/No Project Alternative	**AQ-4:** Operational emissions would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance.	CEQA: **Significant** impact for annual NO_2 Less than significant impact for all other pollutants Measured pollutants: 1-hr NO_2, annual NO_2, 1-hr CO, 8-hr CO, 24-hr PM_{10}, annual PM_{10}, and 24-hr $PM_{2.5}$	Mitigation not applicable	CEQA: **Significant** and unavoidable impact for annual NO_2 Less than significant impact for all other pollutants
		NEPA: No impact	Mitigation not required	NEPA: No impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.2 Air Quality (continued)				
Reduced Project Alternative	**AQ-4:** Operational emissions would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance.	CEQA: **Significant** impact for annual NO_2 Less than significant impact for all other pollutants Measured pollutants: 1-hr NO_2, annual NO_2, 1-hr CO, 8-hr CO, 24-hr PM_{10}, annual PM_{10}, and 24-hr $PM_{2.5}$	**MM AQ-13** through **MM AQ-21**	CEQA: **Significant** and unavoidable impact for annual NO_2 Less than significant impact for all other pollutants
		NEPA: **Significant** impact for annual NO_2 Less than significant impact for all other pollutants Measured pollutants: 1-hr NO_2, annual NO_2, 1-hr CO, 8-hr CO, 24-hr PM_{10}, annual PM_{10}, and 24-hr $PM_{2.5}$	**MM AQ-13** through **MM AQ-21**	NEPA: **Significant** and unavoidable impact for annual NO_2 Less than significant impact for all other pollutants
Proposed Project	**AQ-6:** The proposed Project would expose receptors to significant levels of toxic air contaminants.	CEQA: **Significant** impact for cancer risk at residential and sensitive receptors Less than significant impact for cancer risk at occupational and student receptors Less than significant impact for chronic and acute non-cancer effects at all receptor types	**MM AQ-1** through **MM AQ-21** and **MM 4G-5**	CEQA: Less than significant impact for cancer risk at all receptor types Less than significant impact for chronic and acute non-cancer effects at all receptor types
		NEPA: Less than significant impact for cancer risk at all receptor types Less than significant impact for chronic and acute non-cancer effects at all receptor types	**MM AQ-1** through **MM AQ-21** and **MM 4G-5**	NEPA: Less than significant impact for cancer risk at all receptor types Less than significant impact for chronic and acute non-cancer effects at all receptor types

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.2 Air Quality (continued)				
No Federal Action/No Project Alternative	**AQ-6:** The No Federal Action/No Project Alternative would expose receptors to significant levels of toxic air contaminants.	CEQA: **Significant** impact for cancer risk at all receptor types Less than significant impact for chronic and acute non-cancer effects at all receptor types	Mitigation not applicable	CEQA: **Significant** and unavoidable impact for cancer risk at all receptor types Less than significant impact for chronic and acute non-cancer effects at all receptor types
		NEPA: No impact	Mitigation not required	NEPA: No impact
Reduced Project Alternative	**AQ-6:** The Reduced Project Alternative would expose receptors to significant levels of toxic air contaminants.	CEQA: **Significant** impact for cancer risk at residential, sensitive, and student receptors Less than significant impact for cancer risk at occupational receptors Less than significant impact for chronic and acute non-cancer effects at all receptor types	**MM AQ-1** through **MM AQ-21** and **MM 4G-5**	CEQA: **Significant** and unavoidable impact for cancer risk at residential and sensitive receptors Less than significant impact for cancer risk at occupational and student receptors Less than significant impact for chronic and acute non-cancer effects at all receptor types
		NEPA: Less than significant impact for cancer risk at all receptor types Less than significant impact for chronic and acute non-cancer effects at all receptor types	**MM AQ-1** through **MM AQ-21** and **MM 4G-5**	NEPA: Less than significant impact for cancer risk at all receptor types Less than significant impact for chronic and acute non-cancer effects at all receptor types

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.2 Air Quality (continued)				
Proposed Project & Reduced Project Alternative	**AQ-8:** The proposed Project and Reduced Project Alternative would produce GHG emissions that would exceed CEQA Baseline levels. No impact determination is made with respect to NEPA.	CEQA: **Significant** impact	**MM AQ-13** **MM AQ-15** **MM AQ-22:** LEED **MM AQ-23:** Compact Fluorescent Light Bulbs **MM AQ-24:** Energy Audit **MM AQ-25:** Solar Panels **MM AQ-26:** Recycling **MM AQ-27:** Tree Planting	CEQA: **Significant** and unavoidable impact
		NEPA: No determination of significance	**MM AQ-13**, **MM AQ-15**, and **MM AQ-22** through **MM AQ-27**	NEPA: No determination of significance
No Federal Action/No Project Alternative	**AQ-8:** The No Federal Action/No Project Alternative would produce GHG emissions that would exceed CEQA Baseline levels.	CEQA: **Significant** impact	Mitigation not applicable	CEQA: **Significant** and unavoidable impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
3.3 Biological Resources				
Proposed Project & Reduced Project Alternative	**BIO-1.1:** Construction of facilities could affect individuals of or habitat for the California least tern and other special status species.	CEQA: California Least Tern: **Significant** impact California Brown Pelican: Less than significant impact Western Snowy Plover: No impact Black Skimmer, Burrowing Owl: **Significant** impact Other Special Status Species: Less than significant impact	California Least Tern, Black Skimmer, Burrowing Owl: **MM BIO-1.1a:** Monitor the California Least Tern and Other Bird Nesting **MM BIO-1.1b:** Stone Column Installation Monitoring **MM BIO-1.1c:** Construction Schedule **MM BIO-1.1d:** Construction Contractor Environmental Training **MM BIO-1.1e:** Perches **MM BIO-1.1f:** Lighting **MM BIO-1.1g:** Vegetation Clearing **MM BIO-1.1h:** Protection of Special Status Species Nesting Birds **MM BIO-1.1i:** Protection of California Least Tern Nesting **MM BIO-1.1j:** Noise Buffer Other Special Status Species: Mitigation not required	CEQA: California Least Tern: Less than significant impact California Brown Pelican: Less than significant impact Western Snowy Plover: No impact Black Skimmer, Burrowing Owl: Less than significant impact Other Special Status Species: Less than significant impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.3 Biological Resources (continued)				
Proposed Project & Reduced Project Alternative (continued)	**BIO-1.1 (continued)**	NEPA: California Least Tern: **Significant** impact California Brown Pelican: Less than significant impact Western Snowy Plover: No impact Black Skimmer, Burrowing Owl: **Significant** impact Other Special Status Species: Less than significant impact	California Least Tern, Black Skimmer, Burrowing Owl: **MM BIO-1.1a** through **MM BIO-1.1j** Other Special Status Species: Mitigation not required	NEPA: California Least Tern: Less than significant impact California Brown Pelican: Less than significant impact Western Snowy Plover: No impact Black Skimmer, Burrowing Owl: Less than significant impact Other Special Status Species: Less than significant impact
	BIO-1.2: Operation of facilities could affect individuals of or habitat for the California least tern and other special status species.	CEQA: California Least Tern: **Significant** impact California Brown Pelican: **Significant** impact Other Special Status Species: Less than significant impact	California Least Tern: **MM BIO-1.2a:** Structure Perches **MM BIO-1.2b:** Predator Control **MM BIO-1.2c:** Oil Spill Containment **MM BIO-1.2d**: Security Lighting **MM BIO-1.2e**: Operations Personnel Environmental Training California Brown Pelican: **MM BIO-1.2c** Other Special Status Species: **BIO-1.2f**: Vessel Speed Reduction Program	CEQA: California Least Tern: **Significant** and unavoidable impact California Brown Pelican: **Significant** and unavoidable impact Other Special Status Species: Less than significant impact
		NEPA: California Least Tern: **Significant** impact California Brown Pelican: **Significant** impact Other Special Status Species: Less than significant impact	California Least Tern: **MM BIO-1.2a** through **MM BIO-1.2e** California Brown Pelican: **MM BIO-1.2c** Other Special Status Species: **MM BIO-1.2f**	NEPA: California Least Tern: **Significant** and unavoidable impact California Brown Pelican: **Significant** and unavoidable impact Other Special Status Species: Less than significant impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.3 Biological Resources (continued)				
No Federal Action/No Project Alternative	**BIO-1** (includes **BIO-1.1** and **BIO-1.2**)**:** Construction and operation in this alternative could affect individuals of or habitat for the California least tern and other special status species.	CEQA: California Least Tern: **Significant** impact California Brown Pelican: **Significant** impact Black Skimmer, Burrowing Owl: **Significant** impact Other Special Status Species: Less than significant impact	**MM BIO-1.1a** **MM BIO-1.1c** **MM BIO-1.1e** through **MM BIO-1.1i** **MM BIO-1.2b** **MM BIO-2:** Container Movement **MM BIO-3:** Trash **MM BIO-4:** Oil Spill Containment **MM BIO-5:** Construction and Operations Personnel Environmental Training	CEQA: California Least Tern: **Significant** and unavoidable impact California Brown Pelican: **Significant** and unavoidable impact Black Skimmer, Burrowing Owl: Less than significant impact Other Special Status Species: Less than significant impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
Proposed Project & Reduced Project Alternative	**BIO-2.1:** Construction of facilities would not substantially reduce or alter a state-, federally-, or locally-designated natural habitat or plant community, including wetlands.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
Proposed Project & Reduced Project Alternative	**BIO-2.2:** Operation of facilities would have the potential to substantially reduce or alter a state-, federally-, or locally-designated natural habitat, special aquatic site, or plant community, including wetlands.	CEQA: **Significant** impact	**MM BIO-1.2c**	CEQA: **Significant** and unavoidable impact
		NEPA: **Significant** impact	**MM BIO-1.2c**	NEPA: **Significant** and unavoidable impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.3 Biological Resources (continued)				
No Federal Action/No Project Alternative	**BIO-2 (**includes **BIO-2.1** and **BIO-2.2):** Construction and operation of No Federal Action/No Project Alternative facilities would have the potential to substantially reduce or alter a state-, federally-, or locally-designated natural habitat, special aquatic site, or plant community, including wetlands.	CEQA: **Significant** impact	**MM BIO-4**	CEQA: **Significant** and unavoidable impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
Proposed Project & Reduced Project Alternative	**BIO-4.1:** Construction activities could substantially disrupt local biological communities.	CEQA: **Significant** impact	**MM BIO-1.1g** and **MM BIO-1.1h**	CEQA: Less than significant impact
		NEPA: **Significant** impact	**MM BIO-1.1g** and **MM BIO-1.1h**	NEPA: Less than significant impact
No Federal Action/No Project Alternative	**BIO-4.1:** Construction activities would not substantially disrupt local biological communities.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
Proposed Project	**BIO-4.2:** Operations, including accidental oil spills and introduction of invasive species, have the potential to substantially disrupt local biological communities.	CEQA: Oil Spills: **Significant** impact Runoff of Pollutants: Less than significant impact Invasive Species: **Significant** impact Habitat Alteration: Less than significant impact	Oil Spills: **MM BIO-1.2c** Runoff of Pollutants: Mitigation not required Invasive Species: None feasible Habitat Alteration: Mitigation not required	CEQA: Oil Spills: **Significant** and unavoidable impact Runoff of Pollutants: Less than significant impact Invasive Species: **Significant** and unavoidable impact Habitat Alteration: Less than significant impact
		NEPA: Oil Spills: **Significant** impact Runoff of Pollutants: Less than significant impact Invasive Species: Less than significant impact Habitat Alteration: Less than significant impact	Oil Spills: **MM BIO-1.2c** Runoff of Pollutants: Mitigation not required Invasive Species: Mitigation not required Habitat Alteration: Mitigation not required	NEPA: Oil Spills: **Significant** and unavoidable impact Runoff of Pollutants: Less than significant impact Invasive Species: Less than significant impact Habitat Alteration: Less than significant impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.3 Biological Resources (continued)				
No Federal Action/No Project Alternative	**BIO-4.2:** No Federal Action/No Project operations, including accidental oil spills and introduction of invasive species, have the potential to substantially disrupt local biological communities.	CEQA: Oil Spills: **Significant** impact Runoff of Pollutants: Less than significant impact Invasive Species: **Significant** impact	Oil Spills: **MM BIO-4** Runoff of Pollutants: Mitigation not required Invasive Species: None feasible	CEQA: Oil Spills: **Significant** and unavoidable impact Runoff of Pollutants: Less than significant impact Invasive Species: **Significant** and unavoidable impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
Reduced Project Alternative	**BIO-4.2:** Operations, including accidental oil spills and introduction of invasive species, have the potential to substantially disrupt local biological communities.	CEQA: Oil Spills: **Significant** impact Runoff of Pollutants: Less than significant impact Invasive Species: **Significant** impact Habitat Alteration: Less than significant impact	Oil Spills: **MM BIO-1.2c** Runoff of Pollutants: Mitigation not required Invasive Species: None feasible Habitat Alteration: Mitigation not required	CEQA: Oil Spills: **Significant** and unavoidable impact Runoff of Pollutants: Less than significant impact Invasive Species: **Significant** and unavoidable impact Habitat Alteration: Less than significant impact
		NEPA: Oil Spills: **Significant** impact Runoff of Pollutants: Less than significant impact Invasive Species: **Significant** impact Habitat Alteration: Less than significant impact	Oil Spills: **MM BIO-1.2c** Runoff of Pollutants: Mitigation not required Invasive Species: None feasible Habitat Alteration: Mitigation not required	NEPA: Oil Spills: **Significant** and unavoidable impact Runoff of Pollutants: Less than significant impact Invasive Species: **Significant** and unavoidable impact Habitat Alteration: Less than significant impact
3.5 Geology				
Proposed Project & Reduced Project Alternative	**GEO-1:** The proposed Project or alternative would expose people or property to substantial risk of fault rupture, seismic ground shaking, liquefaction, or other seismically induced ground failure.	CEQA: **Significant** impact	**MM 4A-4:** Seismic Design	CEQA: **Significant** and unavoidable impact
		NEPA: **Significant** impact	**MM 4A-4**	NEPA: **Significant** and unavoidable impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.5 Geology (continued)				
No Federal Action/No Project Alternative	**GEO-1:** This alternative would expose people or property to substantial risk of fault rupture, seismic ground shaking, liquefaction, or other seismically induced ground failure.	CEQA: **Significant** impact	Mitigation not applicable	CEQA: **Significant** and unavoidable impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
Proposed Project & Reduced Project Alternative	**GEO-2:** The proposed Project or alternative could expose people or property to substantial risk of tsunamis or seiches.	CEQA: **Significant** impact	**MM GEO-1:** Emergency Response Planning	CEQA: **Significant** and unavoidable impact
		NEPA: **Significant** impact	**MM GEO-1**	NEPA: **Significant** and unavoidable impact
No Federal Action/No Project Alternative	**GEO-2:** The No Federal Action/No Project Alternative could expose people or property to substantial risk of tsunamis or seiches.	CEQA: **Significant** impact	**MM GEO-1**	CEQA: **Significant** and unavoidable impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
3.6 Ground Transportation				
Proposed Project & Reduced Project Alternative	**TRANS-1:** Proposed Project or alternative construction would result in a short-term, temporary increase in auto traffic.	CEQA: **Significant** impact	**MM TRANS-1:** Outbound Construction Worker Routing **MM 4F-1:** Encouraging Carpooling **MM 4F-2**: Efficient Use of Truck Trips **MM 4F-4:** Ridesharing, Parking Management, Auto Use/Truck Movement Restrictions **MM 4F-5:** Literature on VMT Reduction and Rideshare	CEQA: Less than significant impact
		NEPA: **Significant** impact	**MM TRANS-1** **MM 4F-1** **MM 4F-2** **MM 4F-4** **MM 4F-5**	NEPA: Less than significant impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.6 Ground Transportation (continued)				
No Federal Action/No Project Alternative	**TRANS-1:** Construction in the No Federal Action/No Project Alternative would not result in a short-term, temporary increase in truck or auto traffic.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
3.7 Groundwater and Soils				
Proposed Project & Reduced Project Alternative	**GW-1.1:** Construction activities may encounter toxic substances or other contaminants associated with historical uses of the Port, resulting in short-term exposure (duration of construction) to construction/operations personnel and/or long-term exposure to future site occupants.	CEQA: **Significant** impact	**MM GW-1:** Site Characterization and Remediation of Tank Farm Site 2 **MM GW-2:** Soil, Slurry, and Groundwater Characterization in Areas of Known Contamination **MM GW-3:** Contamination Contingency Plan	CEQA: Less than significant impact
		NEPA: **Significant** impact	**MM GW-1** **MM GW-2** **MM GW-3**	NEPA: Less than significant impact
No Federal Action/No Project Alternative	**GW-1.1:** This alternative would not result in exposure of soils containing toxic substances and petroleum hydrocarbons associated with prior operations, which would be deleterious to humans, based on regulatory standards established by the lead agency for the site.	CEQA: No impact	Mitigation not required	CEQA: No impact
		NEPA: No impact	Mitigation not required	NEPA: No impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.7 Groundwater and Soils (continued)				
Proposed Project & Reduced Project Alternative	**GW-2.1:** Construction activities would potentially result in release of contaminants to soils and groundwater in such concentrations that existing local (Los Angeles Regional Water Quality Control Board [LARWQCB]), state, or federal statutes would be violated.	CEQA: **Significant** impact	**MM GW-4:** Aquifer Cross-Contamination Prevention **MM GW-5:** Frac-Out Prevention	CEQA: Less than significant impact
		NEPA: **Significant** impact	**MM GW-4** **MM GW-5**	NEPA: Less than significant impact
No Federal Action/No Project Alternative	**GW-2.1:** Construction activities would not result in release of contaminants to soils and groundwater in such concentrations that existing local (LARWQCB), state, or federal statutes would be violated.	CEQA: No impact	Mitigation not required	CEQA: No impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
Proposed Project & Reduced Project Alternative	**GW-3.1:** Construction could locally change the rate or direction of movement of existing contaminants, and would potentially expand the area affected by contaminants or increase the level of groundwater contamination.	CEQA: **Significant** impact	**MM GW-2(g):** Soil, Slurry, and Groundwater Characterization in Areas of Known Contamination **MM GW-4** **MM GW-5**	CEQA: Less than significant impact
		NEPA: **Significant** impact	**MM GW-2(g)** **MM GW-4** **MM GW-5**	NEPA: Less than significant impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.7 Groundwater and Soils (continued)				
No Federal Action/No Project Alternative	**GW-3.1:** Construction would not change the rate or direction of movement of existing contaminants, expand the area affected by contaminants, or increase the level of groundwater contamination.	CEQA: No impact	Mitigation not required	CEQA: No impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
3.10 Noise				
Proposed Project & Reduced Project Alternative	**NOI-1:** Construction activities lasting more than 10 days in a 3-month period would exceed existing ambient exterior noise levels by 5 dB(A) or more at a noise-sensitive use.	CEQA: **Significant** impact	**MM 4H-1:** Use of Proper Construction Equipment to Reduce Noise **MM 4H-2:** Reduce Use of Portable Generators **MM 4H-3:** Coordinate Responses to Noise Complaints **MM NOISE-1:** Selection of Contractor For Pile Driving With Consideration of Noise Reduction **MM NOISE-2:** Restricted Hours for Pile Driving **MM NOISE-3:** Temporary Noise Attenuation Barriers	CEQA: **Significant** and unavoidable impact
		NEPA: **Significant** impact	**MM 4H-1** **MM 4H-2** **MM 4H-3** **MM NOISE-1** **MM NOISE-2** **MM NOISE-3**	NEPA: **Significant** and unavoidable impact
No Federal Action/No Project Alternative	**NOI-1:** Construction activities lasting more than 10 days in a 3-month period would not exceed existing ambient exterior noise levels by 5 dB(A) or more at a noise-sensitive use.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: No impact	Mitigation not required	NEPA: No impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.11 Recreation				
Proposed Project & Reduced Project Alternative	**REC-1.1:** Construction of the proposed Project or alternative would result in a substantial loss or diminished quality of recreational, educational, or visitor-oriented opportunities, facilities, or resources.	CEQA: **Significant** impact	**MM NOISE-1** **MM NOISE-2** **MM 4K-4:** Boating Safety Measures During In-Water Construction	CEQA: **Significant** and unavoidable impact
		NEPA: **Significant** impact	**MM NOISE-1** **MM NOISE-2** **MM 4K-4**	NEPA: **Significant** and unavoidable impact
No Federal Action/No Project Alternative	**REC-1.1:** Construction would not result in a substantial loss or diminished quality of recreational, educational, or visitor-oriented opportunities, facilities, or resources.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant
		NEPA: No impact	Mitigation not required	NEPA: No impact
Proposed Project & Reduced Project Alternative	**REC-1.2:** Operations could result in a substantial loss or diminished quality of recreational, educational, or visitor-oriented opportunities, facilities, or resources in the event of an oil spill.	CEQA: **Significant** impact	**MM RISK 2.1a:** Double Hulled Vessels **MM RISK-2.1b:** Quick Release Couplings	CEQA: **Significant** and unavoidable impact
		NEPA: **Significant** impact	**MM RISK-2.1a** **MM RISK-2.1b**	NEPA: **Significant** and unavoidable impact
No Federal Action/No Project Alternative	**REC-1.2:** Operations could result in a substantial loss or diminished quality of recreational, educational, or visitor-oriented opportunities, facilities, or resources in the event of an oil spill.	CEQA: **Significant** impact	Mitigation not applicable	CEQA: **Significant** and unavoidable impact
		NEPA: No impact	Mitigation not required	NEPA: No impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.12 Risk of Upset/Hazardous Materials				
Proposed Project & Reduced Project Alternative	**RISK-2.1:** An accidental crude oil spill from a tanker would result in risks to the public and/or environment.	CEQA: **Significant** impact	**MM 4I-2:** Clean Coastal Waters Cooperative **MM RISK 2.1a:** Double Hulled Vessels **MM RISK-2.1b:** Quick Release Couplings	CEQA: **Significant** and unavoidable impact
		NEPA: **Significant** impact	**MM 4I-2** **MM RISK-2.1a** **MM RISK-2.1b**	NEPA: **Significant** and unavoidable impact
No Federal Action/No Project Alternative	**RISK-2.1:** An accidental crude oil spill from a tanker would result in risks to the public and/or environment.	CEQA: **Significant** impact	Mitigation not applicable	CEQA: **Significant** and unavoidable impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
Proposed Project & Reduced Project Alternative	**RISK-5:** A potential terrorist attack would result in risks to the public and environment in areas near Pier 400.	CEQA: **Significant** impact	**MM 4I-7**: Port Police Protection	CEQA: **Significant** and unavoidable impact
		NEPA: **Significant** impact	**MM 4I-7**	NEPA: **Significant** and unavoidable impact
No Federal Action/No Project Alternative	**RISK-5:** A potential terrorist attack that would result in risks to the public and environment in areas near Pier 400 would not occur.	CEQA: No impact	Mitigation not required	CEQA: No impact
		NEPA: No impact	Mitigation not required	NEPA: No impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.13 Utilities and Public Services				
Proposed Project & Reduced Project Alternative	**PS-4:** The proposed Project or alternative would not generate substantial water and/or wastewater demands that would exceed the capacity of existing facilities in the proposed Project area. The proposed Project or alternative would generate substantial solid waste demands that could exceed capacities.	CEQA: Water supply and Wastewater Treatment Capacity: Less than significant impact Solid Waste: **Significant** impact	**MM 4N-1:** Incorporate Water Conservation Devices And Systems Into Project Design **MM PS-1:** Recycling of Construction Materials **MM PS-2:** Materials with Recycling Content **MM PS-3:** Solid Waste Integrated Resources Plan Compliance	CEQA: Less than significant impact
		NEPA: Water Supply and Wastewater Treatment Capacity: Less than significant impact Solid Waste: **Significant** impact	**MM 4N-1** **MM PS-1** **MM PS-2** **MM PS-3**	NEPA: Less than significant impact
No Federal Action/No Project Alternative	**PS-4:** This alternative would not generate substantial solid waste, water, and/or wastewater demands that would exceed the capacity of existing facilities in the proposed Project area.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
3.14 Water Quality				
Proposed Project & Reduced Project Alternative	**WQ-1.2:** Runoff and oil spills during operation of facilities have the potential to result in discharges which create pollution, contamination, or nuisance, or could cause regulatory standards to be violated in harbor waters.	CEQA: **Significant** impact	**MM 4B-7:** Increase Local Staffing of California Department of Fish and Game (CDFG) Office of Oil Spill Prevention and Response (OSPR) **MM WQ-1.2:** Cleanup of Floating Materials Retained by Containment Boom	CEQA: **Significant** and unavoidable impact
		NEPA: **Significant** impact	**MM 4B-7** **MM WQ-1.2**	NEPA: **Significant** and unavoidable impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.14 Water Quality (continued)				
No Federal Action/No Project Alternative	**WQ-1.2:** Runoff and oil spills during operation of facilities have the potential to result in discharges which create pollution, contamination, or nuisance, or could cause regulatory standards to be violated in harbor waters.	CEQA: **Significant** impact	Mitigation not applicable	CEQA: **Significant** and unavoidable impact
		NEPA: No impact	Mitigation not required	NEPA: No impact
4.0 Cumulative Impacts				
Proposed Project & Reduced Project Alternative	**Air Quality**: Proposed Project or alternative construction would make a cumulatively considerable contribution to cumulatively significant impacts to air quality, as related to emissions and ambient concentration of criteria pollutants (**AQ-1** and **AQ-2**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed	CEQA: Cumulatively considerable and unavoidable
		NEPA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed	NEPA: Cumulatively considerable and unavoidable
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Air Quality**: Proposed Project or alternative operation would make a cumulatively considerable contribution to cumulatively significant impacts to air quality, as related to emissions and ambient concentration of criteria pollutants (**AQ-3** and **AQ-4**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed	CEQA: Cumulatively considerable and unavoidable
		NEPA: Cumulatively considerable and unavoidable for proposed Project and Reduced Project Alternative NEPA: No impact for No Federal Action/No Project Alternative	No mitigation beyond the proposed Project mitigation described above is proposed	NEPA: Cumulatively considerable and unavoidable for proposed Project and Reduced Project Alternative NEPA: No impact for No Federal Action/No Project Alternative

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
4.0 Cumulative Impacts (continued)				
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Air Quality**: Proposed Project or alternative operation would make a cumulatively considerable contribution to odor in the project region (**AQ-5)**.	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed	CEQA: Cumulatively considerable and unavoidable
		NEPA: Cumulatively considerable and unavoidable for proposed Project and Reduced Project Alternative NEPA: No impact for No Federal Action/No Project Alternative	No mitigation beyond the proposed Project mitigation described above is proposed	NEPA: Cumulatively considerable and unavoidable for proposed Project and Reduced Project Alternative NEPA: No impact for No Federal Action/No Project Alternative
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Air Quality**: Proposed Project or alternative construction and operation would make a cumulatively considerable contribution to cumulative health risk impacts (**AQ-6**).	CEQA: Cumulatively considerable and unavoidable contribution to cancer risk and chronic and acute non-cancer risk.	No mitigation beyond the proposed Project mitigation described above is proposed	CEQA: Cumulatively considerable and unavoidable
		NEPA: Cumulatively considerable and unavoidable for proposed Project and Reduced Project Alternative NEPA: No impact for No Federal Action/No Project Alternative	No mitigation beyond the proposed Project mitigation described above is proposed	NEPA: Cumulatively considerable and unavoidable for proposed Project and Reduced Project Alternative NEPA: No impact for No Federal Action/No Project Alternative
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Air Quality**: Proposed Project or alternative construction and operation, in conjunction with construction and operation of other related projects, would make a cumulatively considerable contribution to GHG emission (**AQ-8**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Cumulatively considerable and unavoidable
		NEPA: No impact determination	Not applicable	NEPA: No impact determination

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
4.0 Cumulative Impacts (continued)				
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Biology**: The potential of the proposed Project or alternative to adversely affect state and federally listed endangered, threatened, rare, protected, or Species of Special Concern, or to result in the loss of critical habitat is cumulatively considerable and unavoidable (**BIO-1**).	CEQA: For least tern, brown pelican, burrowing oil, black skimmer, and whale strikes: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed	CEQA: For least tern, brown pelican, and whale strikes: Cumulatively considerable and unavoidable
		NEPA (Proposed Project and Reduced Project Alternative): For least tern, brown pelican, burrowing oil, and black skimmer: Cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact	No mitigation beyond the proposed Project mitigation described above is proposed	NEPA (Proposed Project and Reduced Project Alternative): For least tern and brown pelican: Cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Biology**: The potential of the proposed Project or alternative to substantially reduce or alter state-, federally-, or locally-designated natural habitats, special aquatic sites, or plant communities is cumulatively considerable and unavoidable (**BIO-2**).	CEQA: For eelgrass beds, cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed	CEQA: For eelgrass beds, cumulatively considerable and unavoidable
		NEPA (Proposed Project and Reduced Project Alternative): For eelgrass beds, cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact	No mitigation beyond the proposed Project mitigation described above is proposed	NEPA (Proposed Project and Reduced Project Alternative): For eelgrass beds, cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
4.0 Cumulative Impacts (continued)				
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Biology**: The potential of the proposed Project or alternative to make a cumulatively considerable contribution to disruption of local biological communities (e.g., from the introduction of noise, light, or invasive species) is cumulatively considerable and unavoidable (**BIO-4**).	CEQA: For potential to introduce invasive species and potential for oil spills to affect local biological communities, cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed	CEQA: For potential to introduce invasive species and potential for oil spills to affect local biological communities, cumulatively considerable and unavoidable
		NEPA (Proposed Project and Reduced Project Alternative): For potential for oil spills to affect local biological communities, cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact	No mitigation beyond the proposed Project mitigation described above is proposed	NEPA (Proposed Project and Reduced Project Alternative): For potential for oil spills to affect local biological communities, cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact
Proposed Project & Reduced Project Alternative	**Cultural:** The potential of the proposed Project or alternative to disturb, damage, or degrade listed, eligible, or otherwise unique or important archaeological or ethnographic resources is less than cumulatively considerable with mitigation (**CR-1a**).	CEQA: Cumulatively considerable but avoidable with mitigation	**MM CR-1a**: Stop Work in Area if Prehistoric and/or Historical Archaeological Resources are Encountered Note that MM CR-1a would also apply to the individual impacts of the proposed Project. No additional mitigation beyond that for the proposed Project mitigation is proposed.	CEQA: Less than cumulatively considerable
		NEPA: Cumulatively considerable but avoidable with mitigation	**MM CR-1a** Note that MM CR-1a would also apply to the individual impacts of the proposed Project. No additional mitigation beyond that for the proposed Project mitigation is proposed.	NEPA: Less than cumulatively considerable

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
4.0 Cumulative Impacts (continued)				
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Geology:** The degree to which the proposed Project or alternative places structures and/or infrastructure in danger of substantial damage or exposes people to substantial risk following a seismic event is cumulatively considerable and unavoidable (**GEO-1**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Cumulatively considerable and unavoidable
		NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Geology:** The degree to which the proposed Project or alternative exposes people and structures to substantial risk from local or distant tsunamis or seiches is cumulatively considerable and unavoidable (**GEO-2**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Cumulatively considerable and unavoidable
		NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact
Proposed Project & Reduced Project Alternative	**Ground Transportation:** The potential of the proposed Project or alternative along with other cumulative projects to result in a short-term, temporary increase in construction truck and auto traffic is less than cumulatively considerable with mitigation (**TRANS–1**).	CEQA: Cumulatively considerable but avoidable with mitigation	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Less than cumulatively considerable with mitigation
		NEPA: Cumulatively considerable but avoidable with mitigation	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA: Less than cumulatively considerable with mitigation

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
4.0 Cumulative Impacts (continued)				
Proposed Project & Reduced Project Alternative	**Groundwater and Soils:** The degree to which the proposed Project or alternative results in exposing soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, which would be deleterious to humans is less than cumulatively considerable with mitigation (**GW-1**).	CEQA: Cumulatively considerable but avoidable with mitigation	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Less than cumulatively considerable with mitigation
		NEPA: Cumulatively considerable but avoidable with mitigation	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA: Less than cumulatively considerable with mitigation
Proposed Project & Reduced Project Alternative	**Groundwater and Soils:** The degree to which the proposed Project or alternative would result in a release of contaminants to soils and groundwater in such concentrations that existing local, state, or federal statutes would be violated is less than cumulatively considerable with mitigation (**GW-2**).	CEQA: Cumulatively considerable but avoidable with mitigation	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Less than cumulatively considerable with mitigation
		NEPA: Cumulatively considerable but avoidable with mitigation	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA: Less than cumulatively considerable with mitigation

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
4.0 Cumulative Impacts (continued)				
Proposed Project & Reduced Project Alternative	**Groundwater and Soils:** The degree to which the proposed Project or alternative changes the rate or direction of movement of existing contaminants; expansion of the area affected by contaminants; or increased level of groundwater contamination, which would increase the risk of harm to humans, is cumulatively considerable and unavoidable (**GW-3**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Cumulatively considerable and unavoidable
		NEPA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA: Cumulatively considerable and unavoidable
Proposed Project & Reduced Project Alternative	**Noise:** Proposed Project or alternative construction would make a cumulatively considerable contribution to ambient noise levels at sensitive receivers within the project area (**NOI-1**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Cumulatively considerable and unavoidable
		NEPA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA: Cumulatively considerable and unavoidable
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Recreation:** The Proposed Project or alternative would result in a cumulatively considerable contribution to a substantial loss or diminished quality of recreational, educational, or visitor-oriented opportunities, facilities, or resources (**REC-1**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Cumulatively considerable and unavoidable
		NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable NEPA (No Federal Action/No Project Alternative): No impact

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
4.0 Cumulative Impacts (continued)				
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Risk of Upset/Hazardous Materials:** The potential of the proposed Project or alternative to substantially increase the probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance is cumulatively considerable and unavoidable (**RISK-2**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Cumulatively considerable and unavoidable
		NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable
		NEPA (No Federal Action/No Project Alternative): No impact		NEPA (No Federal Action/No Project Alternative): No impact
Proposed Project & Reduced Project Alternative	**Risk of Upset/Hazardous Materials:** The proposed Project or alternative would make a cumulatively significant contribution to the risk that a potential terrorist attack would result in adverse consequences to areas near the proposed Project site **(RISK-5).**	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Cumulatively considerable and unavoidable
		NEPA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA: Cumulatively considerable and unavoidable
Proposed Project & Reduced Project Alternative	**Utilities and Public Services:** The proposed Project or alternative would make a cumulatively considerable contribution to cumulatively significant impacts on demand for public services, specifically solid waste disposal (**PS-4**).	CEQA: For solid waste, cumulatively considerable but avoidable with mitigation	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Less than cumulatively considerable
		NEPA: For solid waste, cumulatively considerable but avoidable with mitigation	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA: Less than cumulatively considerable

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
4.0 Cumulative Impacts (continued)				
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Water Quality, Sediments, and Oceanography:** The proposed Project or alternative would make a cumulatively considerable contribution to potential to create pollution, cause nuisances, or violate of applicable standards (**WQ-1**).	CEQA: Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	CEQA: Cumulatively considerable and unavoidable
		NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable	No mitigation beyond the proposed Project mitigation described above is proposed.	NEPA (Proposed Project and Reduced Project Alternative): Cumulatively considerable and unavoidable
		NEPA (No Federal Action/No Project Alternative): No impact		NEPA (No Federal Action/No Project Alternative): No impact
5.0 Environmental Justice				
Proposed Project & Reduced Project Alternative	**Air Quality (AQ-2):** Construction would result in off-site ambient concentrations of criteria air pollutants (1-hr and annual NO_2, 24-hr PM_{10}, 24-hr $PM_{2.5}$); concentrations would be higher in areas in proximity to the proposed Project or alternative.	Disproportionately high and adverse effect on minority and low-income populations.	No mitigation beyond the proposed Project mitigation described above is proposed.	Disproportionately high and adverse effect on minority and low-income populations.

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
5.0 Environmental Justice (continued)				
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**AQ-4:** Operations would result in offsite exceedances of a SCAQMD threshold for criteria air pollutants (annual concentrations of NO_2); concentrations would be higher in areas in proximity to the proposed Project or alternative.	Disproportionately high and adverse effect on minority and low-income populations.	No mitigation beyond the proposed Project mitigation described above is proposed.	Disproportionately high and adverse effect on minority and low-income populations.
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**AQ-5:** The proposed Project or alternative would create less than significant odor impacts, but would make a cumulatively considerable contribution to cumulative odor impacts.	Disproportionately high and adverse effects on minority and low-income populations.	No mitigation measures are applicable.	Disproportionately high and adverse effect on minority and low-income populations.
Proposed Project	**AQ-6**: Increases in toxic emissions from the proposed Project would result in a cumulatively considerable contribution to cumulatively significant impacts on cancer risk and acute and chronic non-cancer risks.	Disproportionately high and adverse effects on minority and low-income populations.	No mitigation beyond the proposed Project mitigation described above is proposed.	Disproportionately high and adverse effect on minority and low-income populations.

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
5.0 Environmental Justice (continued)				
No Federal Action/No Project Alternative & Reduced Project Alternative	**AQ-6**: Increases in toxic emissions from either alternative would result in a significant impact as well as a cumulatively considerable contribution to cumulatively significant impacts on cancer risk. Increases in toxic emissions from either alternative would result in a cumulatively considerable contribution to cumulatively significant impact on acute and chronic non-cancer risks.	Disproportionately high and adverse effects on minority and low-income populations.	No mitigation beyond the proposed Project mitigation described above is proposed.	Disproportionately high and adverse effect on minority and low-income populations.
Proposed Project & Reduced Project Alternative	**Noise (NOI-1):** The proposed Project or alternative would produce significant and unavoidable construction noise impacts at three sensitive receptors: Area 1 (Berth 204), Area 2 (Lighthouse Yacht Landing), and Area 21 (Stephen White St. & Oliver Vickery Circle Way).	Disproportionately high and adverse effect on minority populations.	No mitigation beyond the proposed Project mitigation described above is proposed.	Disproportionately high and adverse effect on minority populations.

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
5.0 Environmental Justice (continued)				
Proposed Project & Reduced Project Alternative	**Recreation (REC-1.1):** Impacts resulting from construction noise would occur at two locations in Wilmington (Area 1 Berth 204 and Area 2 Lighthouse Yacht Landing) and two locations in San Pedro (Area LR-2 Reservation Point, representing noise conditions in the harbor for recreational boaters, and Area 21 (Stephen White Street and Oliver Vickery Circle Way), representing noise conditions at Cabrillo Beach).	Disproportionately high and adverse effect on minority and low-income populations.	No mitigation beyond the proposed Project mitigation described above is proposed.	Disproportionately high and adverse effect on minority and low-income populations.
Proposed Project, No Federal Action/No Project Alternative, & Reduced Project Alternative	**Recreation (REC-1.2):** Proposed Project or alternative operations could result in a temporary substantial loss or diminished quality of recreational resources in the event of an oil spill.	Disproportionately high and adverse effect on minority and low-income populations.	No mitigation beyond the proposed Project mitigation described above is proposed.	Disproportionately high and adverse effect on minority and low-income populations.

Table ES-3. Summary of Potential Significant Impacts and Mitigation* for the Proposed Project and Alternatives (continued)

*All mitigation measures are summaries of much more detailed mitigation measures found in the individual impact sections.

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
5.0 Environmental Justice (continued)				
Proposed Project & Reduced Project Alternative	**Risk of Upset & Hazardous Materials (RISK-5):** Potential impacts related to risk of a terrorist attack at Pier 400 would be considered significant given the environmental and public safety consequences associated with a successful terrorist attack.	Disproportionately high and adverse effect on minority and low-income populations.	No mitigation beyond the proposed Project mitigation described above is proposed.	Disproportionately high and adverse effect on minority and low-income populations.

ES.5.2.1 Unavoidable Significant Impacts

Table ES-3 summarizes impacts, including unavoidable significant impacts, associated with the proposed Project and alternatives. This Draft SEIS/SEIR has determined that implementation of the proposed Project or one or more of the alternatives would result in significant and unavoidable impacts on:

- Air Quality;
- Biological Resources;
- Geology;
- Noise;
- Recreation;
- Risk of Upset/Hazardous Materials; and
- Water Quality, Sediments, and Oceanography.

No feasible mitigation measures are available that would avoid all of the potential impacts or reduce all impacts to less than significant levels. Therefore, these impacts are considered significant and unavoidable.

Under CEQA and NEPA, the proposed Project and the Reduced Project Alternative have significant impacts on air quality because the air emissions from construction and operation and resulting ambient concentrations of criteria pollutants could not be mitigated to less than significant even with the application of all feasible mitigation measures. The No Federal Action/No Project Alternative would have significant impacts on air quality under CEQA because the air emissions from operation and resulting ambient concentrations of criteria pollutants could not be mitigated to less than significant even with the application of all feasible mitigation measures.

Prior to mitigation, under CEQA, the proposed Project and both alternatives would result in a significant increase to cancer risk due to emissions of toxic air contaminants (TACs). With mitigation, the proposed Project would not result in a significant increase to cancer risk, but both alternatives would. For the Reduced Project Alternative, there would be unavoidable significant impacts to cancer risk at residential and sensitive receptors. For the No Federal Action/No Project Alternative, mitigations would not apply (although the impact assessment for the No Federal Action/No Project Alternative does assume that existing terminals would comply with CAAP measures as of the time of lease renewal; and applicable CAAP measures were applied to the emission estimates for activity associated with existing berths under the No Federal Action/No Project Alternative consistent with known lease renewal schedules and other information received from the Port, as well as the Port of Long Beach). The No Federal Action/No Project Alternative would result in significant and unavoidable impacts on cancer risk at all receptor types, and also would result in the highest increase in cancer risk of any alternative (except under NEPA, for which the No Federal Action/No Project Alternative has no impacts since it is identical to the NEPA Baseline). The proposed Project would result in a lower increase in cancer risk under CEQA than either alternative, and a lower increase under NEPA than the Reduced Project Alternative. Neither the proposed Project nor either alternative

would result in a significant unavoidable impact on cancer risk under NEPA, and neither the proposed Project would result in a significant unavoidable impact on chronic or acute non-cancer health risk under either CEQA or NEPA.

The proposed Project and all alternatives would result in a significant increase in greenhouse gases (GHGs) under CEQA. Because no NEPA significance threshold has been established, no impact determination is made for the significance of GHG emissions under NEPA.

Significant impacts would also occur on Biological Resources for all alternatives under CEQA, and for the proposed Project and Reduced Project Alternative under NEPA, due to potential impacts to special status bird species (specifically the California least tern and California brown pelican) and to natural habitats (specifically the Cabrillo Beach eelgrass beds) from the potential for oil spills in Port waters. Additionally, all alternatives have significant impacts on biological resources under CEQA, and the Reduced Project Alternative under NEPA, from the introduction of invasive (non-native) species via organisms attached to vessel hulls and other equipment in the water or ballast water. These impacts could not be mitigated to less than significant even with the application of all feasible mitigation measures.

All of the alternatives also have a significant and unavoidable impact on Geology under CEQA, and the proposed Project and Reduced Project Alternative under NEPA, due to the increased exposure of people and property to seismic hazards, tsunamis, and seiches.

The proposed Project and the Reduced Project Alternative would have an unavoidable significant impact under CEQA and NEPA related to noise, due to construction noise impacts on sensitive receptors. The proposed Project and Reduced Project Alternative would result in temporary but significant construction noise impacts under both CEQA and NEPA at three sensitive receptors: Area 1 (Berth 204), Area 2 (Lighthouse Yacht Landing), and Area LR-2 (Reservation Point) (see Figure 3.10-1 for locations).

The proposed Project and Reduced Project Alternative would result in significant unavoidable impacts under CEQA and NEPA associated with significant noise levels from construction activities (i.e., due to pile driving associated with Pier 400 and pipeline construction) at recreational receptors which could be perceived by some to significantly diminish the quality of recreational experience. Additionally, operation of the proposed Project and all alternatives under CEQA and under the proposed Project and the Reduced Project Alternative under NEPA would result in significant unavoidable impacts on the quality of recreational and visitor oriented-resources and potentially result in a loss of recreational resources due to potential oil spills associated with proposed operations at the Marine Terminal at Pier 400, tank farm sites, and pipeline corridors.

All of the alternatives have a significant impact on Risk of Upset/Hazardous Materials under CEQA, and the proposed Project and Reduced Project Alternative under NEPA, due to potential impact of crude oil spills during vessel transit and in Port waters, specifically due to the potential for impacts on sensitive or endangered species. Additionally, the proposed Project and the Reduced Project Alternative have

a significant and unavoidable impact due to the risks to the public and environment in areas near Pier 400 due to a potential terrorist attack.

All of the alternatives would have significant water quality impacts under CEQA, and the proposed Project and Reduced Project Alternative under NEPA, during operations from illegal or inadvertent discharges from vessels during product offloading at Berth 408 and the potential for oil spills in the Harbor (under conditions of large spill volumes, incomplete containment and recovery, and wide dispersion by tides and wind), for which there is no feasible mitigation.

ES.5.2.2 Summary of Significant Impacts that Can Be Mitigated, Avoided, or Substantially Lessened

Table ES-3 identifies the significant impacts that can be mitigated, avoided or substantially lessened. This Draft SEIS/SEIR has determined that implementation of the proposed Project or one or more of the alternatives would result in significant impacts that can be mitigated to less than significance on:

- Ground Transportation and Circulation;
- Groundwater and Soils; and
- Utilities and Public Services.

Under CEQA and NEPA, the proposed Project and the Reduced Project Alternative would result in potentially significant impacts to groundwater and soils due to (1) grading and construction that could potentially expose construction personnel, existing nearby operations personnel, and future occupants of the site to contaminated soil and groundwater; (2) water quality impacts from horizontal directional drilling (HDD) during pipeline construction; and (3) potential to change the rate or direction of contaminant movement along Pipeline Segment 3 South (as defined in Section 3.7). The proposed Project would have potentially significant impacts under CEQA and NEPA since the groundwater contamination has been documented adjacent to portions of Pipeline Segments 1, 2, and 3, as well as in the vicinity of Tank Farm Sites 1 and 2. Other areas of subsurface groundwater contamination are likely present along the proposed pipeline corridors, due to the prolonged duration of industrial land use in the proposed Project area. However, all groundwater impacts would be mitigated to less than significant (see Section 3.7).

Under CEQA and NEPA, the proposed Project and the Reduced Project Alternative would result a significant impact to Ground Transportation and Circulation due to a construction period impact at one intersection, Navy Way/Seaside Avenue, during the PM peak hour, due to automobile traffic. However, with implementation of proposed mitigation measures, this impact would be mitigated to less than significant (see Section 3.6).

Under CEQA and NEPA, the proposed Project and the Reduced Project Alternative would have potentially significant impacts to Utilities and Public Services from solid waste generated during construction activities. However, with implementation of proposed mitigation measures, this impact would be mitigated to less than significant (see Section 3.13).

ES.5.2.3 Summary of Less Than Significant Impacts

Based on the environmental review in this Draft SEIS/SEIR, as summarized in Table ES-3, no significant impacts are expected under both CEQA and NEPA from the proposed Project or alternatives in the following environmental issue areas:

- Aesthetics/Visual Resources;
- Cultural Resources;
- Land Use;
- Marine Transportation; and
- Population and Housing.

ES.5.2.4 Cumulative Impacts

The Project was analyzed in conjunction with other related past, present and future projects in the area for potential to contribute to cumulatively significant impacts. As part of performing a cumulative analysis, impacts from the proposed Project and other Port projects are overlapped to determine if the impacts that are less than significant individually, become significant when combined. With implementation of proposed mitigation measures, the proposed Project would not result in cumulatively considerable impacts for the following resource areas:

- Aesthetics/Visual Resources;
- Cultural Resources;
- Ground Transportation;
- Marine Transportation;
- Utilities and Public Services; and
- Population and Housing.

The proposed Project or alternatives would result in cumulatively considerable impacts for the following resources:

- Air Quality;
- Biological Resources;
- Geology;
- Groundwater and Soils;
- Land Use;
- Noise;
- Recreation;
- Risk of Upset/Hazardous Materials; and
- Water Quality, Sediments, and Oceanography.

Cumulative impact evaluations for each resource are included in Chapter 4 of this Draft SEIS/SEIR.

ES.5.2.5 Environmental Justice

The potential for the proposed Project and alternatives to cause disproportionately high and adverse human health and environmental effects on low-income and minority populations is discussed in the Environmental Justice analysis (Chapter 5) and summarized in Table ES-3. The proposed Project and all of the alternatives would result in disproportionate effects on minority and/or low-income populations as a result of significant unavoidable impacts related to air quality, noise, recreation, and risk of upset/hazardous materials. Other potentially significant impacts of the proposed Project and the alternatives would either be reduced to less than significant or less than cumulatively considerable through implementation of mitigation measures, or would not have disproportionate effects on minority and low-income populations.

ES.5.2.6 Socioeconomic and Growth Inducing Impacts

As discussed in Chapters 7 and 8, because the proposed Project and the alternatives would be industrial facilities, they are not expected to stimulate substantial economic or population growth, remove obstacles to population growth, or necessitate the construction of new community facilities that would lead to additional growth in the surrounding area. In addition, because none of the alternatives, including the proposed Project, includes the development of new housing or population-generating uses, they would not trigger or cause substantial new residential development in the proposed Project area. The proposed Project also would not induce growth indirectly, because the new infrastructure that would be built for the proposed Project would accommodate marine imports of crude oil in order to replace declining crude supplies from in-state (see Chapter 8).

During the construction phase of the proposed Project or the Reduced Project Alternative, employment would be greatest in year 2010, with construction phase employment peaking at, at most, at 523 jobs (note that this peak level would occur for a brief time if at all). In the operation phase, in 2040, the proposed Project would add about 54 jobs while the Reduced Project Alternative would add about 61 jobs. Given the nature of the jobs and the size of the regional economy (e.g., 8.3 million jobs in the five-county area in 2008), both construction and operation jobs are expected to be filled by people already living within the southern California region. The new employment is considered a benefit; however, as discussed in Chapters 7 and 8, neither the proposed Project nor the alternatives are expected to result in or induce substantial or significant population growth. The primary economic benefit of the proposed Project and Reduced Project Alternative is not related to direct employment but, rather, is related to the replacement of declining domestic crude oil supply with imported supply, which would be refined at area refineries to produce transportation fuels that are then sold to consumers and other users.

ES.5.2.7 Significant Irreversible Changes to the Environment

The proposed Project and all alternatives would require the use of non-renewable resources, such as lumber, metal alloys, and aggregate resources, for the physical components. However, neither the proposed Project nor the alternatives represent unusually large construction projects that would use extraordinary amounts of non-renewable resources in comparison to other urban or industrial development projects of similar scope and magnitude.

Resources that are committed irreversibly and irretrievably are those that would be used by a project on a long-term or permanent basis. Resources irreversibly committed to the proposed Project include the materials necessary to construct the wharf, (e.g., fossil fuels, capital, rock, concrete, gravel, and soils); and the fossil fuels necessary to operate the project.

Fossil fuels and energy in the form of diesel oil and gasoline would be used for construction equipment and vehicles. During operations, diesel oil and gasoline would be used by ships, terminal equipment, locomotives, trucks, and other vehicles. Electrical energy and natural gas would be consumed during construction and operation. These energy resources would be irretrievable and irreversible. In addition, the contribution of the proposed Project and all of the alternatives to global warming, as a result of emissions of greenhouse gases, represents an irreversible change to the environment.

Non-recoverable materials and energy would be used during construction and operational activities, but the amounts needed are easily accommodated by existing supplies. Although the increase in the amount of materials and energy used would be insignificant, they would nevertheless be unavailable for other uses.

ES.5.3 Environmentally Preferred and Environmentally Superior Alternative

NEPA requires the identification of an environmentally preferred alternative and CEQA requires the identification of an environmentally superior alternative. Under CEQA, if the No Project Alternative is determined to be environmentally superior, the SEIR must identify an environmentally superior alternative from among the other alternatives.

In Chapter 6 the No Federal Action/No Project Alternative and the Reduced Project Alternative are compared to the proposed Project and ranked according to their level of impact. That comparison indicates that the No Federal Action/No Project Alternative has the fewest overall environmental impacts and is the environmentally preferred alternative under NEPA. The comparison also indicates that the No Federal Action/No Project Alternative is the environmentally superior alternative under CEQA for most resources, although the proposed Project is environmentally superior for air quality, geology, risk of upset, and water quality.

However, the purpose and need of the proposed Project, as defined by the USACE and outlined in Section 1.1.3 and Section 2.3.2, is to construct a crude oil marine

terminal on Pier 400 at Berth 408 and related transfer facilities to receive, store, and convey part of the forecasted increases in the volume of crude oil that will be shipped to southern California by sea. The Port is one of only five locations in the state identified in the Coastal Act (PRC Sections 30700 and 30701) for the purposes of international maritime commerce. Legal mandates of the LAHD and the California Coastal Commission identify the Port of Los Angeles and its facilities as a primary economic/coastal resource of the State and an essential element of the national maritime industry for promotion of commerce, navigation, fisheries and operations of a harbor. Leaving the premises vacant for any extended time is not consistent with the legal mandates of the Port. Based on existing demand and capacity limitations on industrial Port uses and Trust purposes, all or most of the industrial facilities adjacent to deep water are needed to accommodate maritime commerce.

Under the No Federal Action/No Project Alternative, it is not considered likely that another liquid bulk terminal project would be approved at the site in the foreseeable future, since there is no proposal to do so. Thus, the No Federal Action/No Project Alternative would not meet the purpose and need of the proposed Project under NEPA. As such, the proposed Project would be the preferred alternative.

The No Federal Action/No Project Alternative also would not meet the Project objectives under CEQA (Section 2.3.1) to establish and maximize the Port's crude oil handling efficiency and capacity, construct a crude oil marine terminal capable of accommodating deep-draft VLCC tankers, construct associated infrastructure capacity that would efficiently accommodate a portion of the forecasted increases in demand for crude oil to be shipped to southern California by sea while maximizing the use of deep-water facilities created for the purpose by the Deep-Draft Navigation Improvements Project, or integrate into the Port's overall utilization of available shoreline.

Thus, based on the analysis in this Draft SEIS/SEIR, the No Federal Action/No Project Alternative would be the environmentally superior alternative, but would not meet the CEQA project objectives. As noted above, under CEQA, if the No Project Alternative is determined to be environmentally superior, the SEIR must identify an environmentally superior alternative from among the other alternatives. Among the other alternatives, the proposed Project is environmentally superior, as Reduced Project Alternative impacts would be generally similar but slightly higher in some cases and for some resource areas. In addition, the proposed Project would better accomplish the Project goals and objectives compared to the Reduced Project Alternative.

ES.6 Public Comment

ES.6.1 Issues Raised

The USACE and the LAHD issued a NOI and NOP and CEQA Initial Study Checklist and Environmental Assessment Checklist for the proposed Project on June 8, 2004. The two agencies held a joint public hearing/scoping meeting on July 8, 2004 at the Banning's Landing Community Center in Wilmington, California. Fourteen people attending the public scoping meeting commented on the proposed Project. A 45-day review and comment period ended on July 16, 2004.

Approximately 15 comment letters were received from agencies, organizations, and individuals. The scope of analysis and technical work conducted as part of preparing this Draft SEIS/SEIR were developed to address the comments received from public agencies and the public.

Written and oral comments have been grouped into common topics and are summarized below by the topic raised. Table ES-4 summarizes the comments made by individuals and where those comments are addressed in the SEIS/SEIR. The majority of the comments received during the original scoping effort focuses on the following topics:

- The environmental review/permitting process (addressed in Chapters 1 and 2);
- Project purpose and need (addressed in Chapter 1);
- Project description (addressed in Chapter 2);
- Related projects and associated potential for cumulative effects (addressed in Chapter 4);
- Impacts of the Project on air quality, health risk associated with diesel emissions, and appropriate mitigation measures (addressed in Section 3.2);
- Consideration of impacts due to upsets, spills, natural disaster, man-made hazards, or intentional attacks (addressed in Sections 3.9 and 3.12);
- Consideration of a reasonable range of alternatives (addressed in Chapters 2, 3, and 6);
- Consideration of mitigation measures to resolve significant impacts (addressed in Chapter 3); and
- Consideration of the Environmental Justice effects (addressed in Chapter 5).

Table ES-4. Summary of Responses to the NOI/NOP and Public Meeting

Comment Summary	*Where Addressed in the Draft SEIS/SEIR*
Evaluation of tsunami, seiche, and passing vessel effects should be carefully evaluated.	Section 3.5, Geology Section 3.9, Marine Transportation
Compliance with MOTEMS. Liquefaction should be addressed in the EIR.	Section 3.5, Geology Section 3.12, Risk of Upset/Hazardous Materials
Impacts from vessel collisions, failure of terminal, mooring/berthing system failure, human error and terrorist activity.	Section 3.9, Marine Transportation Section 3.12, Risk of Upset/Hazardous Materials
Evacuation and fire issues will need to be evaluated.	Section 3.12, Risk of Upset/Hazardous Materials Section 3.13, Utilities and Public Services
Project effects on aging marine terminal infrastructure and impacts of ship numbers and size on air quality, vessel traffic, spills, and invasive species from ballast water.	Section 3.2, Air Quality and Meteorology Section 3.3, Biological Resources Section 3.9, Marine Transportation
A records search should be conducted to identify potential cultural resources in the project area. In addition an archeological inventory survey and Sacred Lands File Check should be done. Lack of surface evidence of archeological resources does not preclude their subsurface existence.	Section 3.4, Cultural Resources

Table ES-4. Summary of Responses to the NOI/NOP and Public Meeting (continued)

Comment Summary	*Where Addressed in the Draft SEIS/SEIR*
Any work performed within the State Right-of-way will need a Caltrans Encroachment Permit. A traffic study will be needed to evaluate impacts to the State transportation system. Recommend limiting construction related truck trips to off-peak hours; a Transportation Permit may be needed for over-sized or over-weight vehicles. Construction activities will need to conform to NPDES and Post-Construction Storm Water Management.	Section 3.6, Ground Transportation and Circulation Section 3.7, Groundwater and Soils Section 3.14, Water Quality, Sediments and Oceanography
Potential impacts to the least tern, a fully protected species, are a concern. Especially during the nesting season. Potential water quality and erosion impacts should also be addressed. Invasive species from ballast water due to increased marine traffic should also be addressed.	Section 3.3, Biological Resources Section 3.7, Groundwater and Soils Section 3.14, Water Quality, Sediments and Oceanography
LAXT requests that the "LAXT Crude Berth" option be considered as a project alternative as it is a safe and economical option.	Chapter 2, Section 2.5, Alternatives
Due to environmental, operational, and economic advantages over the LAHD Pier 400 project, the LAHD Berth 124 project should be included as a project alternative.	Chapter 2, Section 2.5, Alternatives
Construction and operations of the project would result in pollution problems for the surrounding communities.	Section 3.2, Air Quality and Meteorology
Review must include impacts of construction and operation of the terminal complex. Impacts from operating the entire proposed Pier 400 project must be considered.	Chapter 3, Sections 3.1 through 3.15 Chapter 4, Cumulative Analysis
Several communities are in close proximity to the project and public health impacts must be considered.	Section 3.2, Air Quality and Meteorology Chapter 4, Cumulative Analysis Chapter 5, Environmental Justice Appendix H, Air Quality Technical Information
Mitigation for air quality, spills, and terrorism attacks must be included.	Section 3.2, Air Quality and Meteorology Section 3.12, Risk of Upset/Hazardous Materials
Environmental justice issues are also a concern.	Chapter 5, Environmental Justice
Mitigation measures should be adopted to the standard set by the China Shipping settlement level. Mitigation measures should be considered against the no-project option.	Chapter 3, Sections 3.1 through 3.15 Appendix B, PCAC and NNI Mitigation Measures
CBE would be interested in developing a Good Neighbor Agreement between the community and PE (now PLAMT).	Comment noted.
SCAQMD recommends that the 1993 CEQA Air Quality Handbook be used as guidance in preparation of the air quality analysis. The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. If the project generates significant adverse air quality impacts, all feasible mitigation measures must be utilized during project construction and operation to minimize or eliminate impacts. The SCAQMD has data available at their Public Information Center.	Section 3.2, Air Quality and Meteorology
SCAG determined that the Project is not regionally significant per SCAG Intergovernmental Review Criteria and CEQA Guidelines; therefore not warranting further comment.	Section 3.8, Land Use
Hazardous materials at Pier 400 violate the Master Plan. According to the Port Master Plan hazardous liquid bulk storage facilities, from Wilmington and San Pedro, are to be relocated to a new remote site. Submitted August 22, 2001 Daily Breeze article "*Wentworth's port term ends, but will '100-year* war'?"	Chapter 2, Section 2.5, Alternatives Section 3.8, Land Use

Table ES-4. Summary of Responses to the NOI/NOP and Public Meeting (continued)

Comment Summary	*Where Addressed in the Draft SEIS/SEIR*
Questions: Will the project create crude or clean oils? Commitment to a union workforce? How many alternative proposals did you consider?	Chapter 2, Project Description Chapter 2, Section 2.5, Alternatives
The facility is open and hazardous to the community of San Pedro. The Project would narrow the passageway to APL and APM facilities.	Section 3.9, Marine Transportation Section 3.12, Risk of Upset/Hazardous Materials
Hazardous materials at Pier 400 violate the Master Plan.	Section 3.8, Land Use
Provided a letter to Janice Hahn. The Central San Pedro Neighborhood Council adopted a motion opposing the applicant's proposal. Reasons for opposing the project include: no commitment to utilizing union workers, need to relocate hazardous facilities, tanker spills, air quality concerns, earthquake hazards, lack of evacuation plan, explosive cargo, and potential terrorist attack target. Hazardous materials at Pier 400 violate the Master Plan.	Chapter 2, Project Description Section 3.2, Air Quality and Meteorology Section 3.5, Geology Section 3.8, Land Use Section 3.9, Marine Transportation Section 3.12, Risk of Upset/Hazardous Materials
Cautions the USACE to include a thorough environmental justice and cumulative impact section.	Chapter 4, Cumulative Analysis Chapter 5, Environmental Justice
Need to have a project labor agreement for all construction projects. Must continue with the strong union tradition of San Pedro and Wilmington. The most important asset of the community is skilled labor.	Chapter 2, Project Description
The project is illegal under terms stated in the Port Master Plan. The proper use of the facility should be for relocation of the hazardous liquid bulk facilities. The Master Plan needs to be re-done.	Chapter 1, Introduction Chapter 2, Project Description Section 3.8, Land Use
There is concern that the project would cause impacts to the following: least terns - a federally endangered species, aesthetics, and air quality. Risk of oil spills is also a concern.	Section 3.1, Aesthetics and Visual Resources Section 3.2, Air Quality and Meteorology Section 3.3, Biological Resources Section 3.12, Risk of Upset/Hazardous Materials Section 3.14, Water Quality, Sediments, and Oceanography
Requests a 90 day comment period, face to face question/comment period for homeowner associations, minimum 4-page informational brochure discussing environmental and public health impacts.	Comment noted.
Where will the crude oil be coming from, and what is the quantity and volume, safety of pipeline, emission impacts from all facilities that will be refining the oil, and impacts from truck transport?	Chapter 1, Introduction Chapter 2, Project Description Section 3.2, Air Quality and Meteorology Section 3.6, Ground Transportation and Circulation Section 3.12, Risk of Upset/Hazardous Materials
Mitigation Requests: a $10 million environmental health trust fund, $2 million to conduct public health survey in the community.	Appendix B, PCAC and NNI Mitigation Measures
The Port Master Plan needs to be updated. Other issues raised include the need for a relocation of hazard materials and a Risk Management Plan.	Chapter 2, Project Description Section 3.8, Land Use
How many tankers will be coming into the Port, and who or what is going to unload the ship? Generating more power for unloading will generate more air pollutants. Truck crashes and other safety hazards are also a concern.	Chapter 2, Project Description Section 3.2, Air Quality and Meteorology Section 3.6, Ground Transportation and Circulation Section 3.12, Risk of Upset/Hazardous Materials
Water quality and wildlife concerns due to hazardous and toxic nature of off loaded petroleum. Requests a stormwater pollution and prevention plan, as well as spill prevention control and container plan. Construction and operation impacts to least tern.	Section 3.3, Biological Resources Section 3.7, Groundwater and Soils Section 3.14, Water Quality, Sediments and Oceanography

Table ES-4. Summary of Responses to the NOI/NOP and Public Meeting (continued)

Comment Summary	*Where Addressed in the Draft SEIS/SEIR*
Lack of comprehensive plan for liquid bulk facilities. Opposes single-hull tankers due to spill risks. What is the origin of entering ships?	Chapter 1, Introduction Chapter 2, Project Description Section 3.8, Land Use Section 3.9, Marine Transportation Section 3.12, Risk of Upset/Hazardous Materials
Would like clean burning or alternative fuel.	Section 3.2, Air Quality and Meteorology
Risk to facilities due to earthquakes.	Section 3.5, Geology
Would like a commitment for unionized labor.	Chapter 2, Project Description
Concerned about the scope of the project. Concerns about air quality, water quality, navigation noise, industrial blight, and cancer risks. Environmental justice, public health, and cumulative impacts should be evaluated.	Section 3.2, Air Quality and Meteorology Section 3.10, Noise Section 3.14, Water Quality, Sediments and Oceanography Chapter 4, Cumulative Analysis Chapter 5, Environmental Justice Appendix H, Air Quality Technical Information
Project operation and construction would be disastrous to least tern. Storm water prevention plan for water pollution from storm runoff. Contaminated sediments are also an issue in the Port.	Section 3.3, Biological Resources Section 3.14, Water Quality, Sediments and Oceanography
Air quality impacts should be addressed. A health costs impact study should be prepared. Other issues: blight, aesthetics, risk of explosions, cancer risks, and cumulative impacts.	Section 3.1, Aesthetics and Visual Resources Section 3.2, Air Quality and Meteorology Section 3.12, Risk of Upset/Hazardous Materials Chapter 4, Cumulative Analysis Chapter 5, Environmental Justice Appendix H, Air Quality Technical Information
Terrorism, security, number of workers that will occupy Pier 400, evacuation, and hazardous spills.	Section 3.9, Marine Transportation Section 3.12, Risk of Upset/Hazardous Materials Section 3.14, Water Quality, Sediments and Oceanography
Would like to see the following included in the EIR: effect of the use of larger new technology oil tank vessels on air quality, number of ships entering the Port, effect of using pipelines versus trucks for transporting petroleum from the facility specifically in regard to air quality and traffic, economic effects of building the project, positive or negative effects on jobs and the economic multiplier effect by construction and operation of the project, future transportation needs, economic effects of using the petroleum in LA area, and operation compliance with regulations.	Chapter 2, Project Description Section 3.2, Air Quality and Meteorology Section 3.6, Ground Transportation and Circulation Chapter 4, Cumulative Analysis Chapter 7, Socioeconomics Chapter 8, Growth-Inducing Impacts Appendix B, PCAC and NNI Mitigation Measures
Concerns: explosion potential, ship traffic, least tern, earthquakes, and liquefaction.	Section 3.3, Biological Resources Section 3.5, Geology Section 3.9, Marine Transportation Section 3.12, Risk of Upset/Hazardous Materials
Need a balance between economic interests and living conditions in terms of environmental conditions. Should consider the LAXT alternative.	Chapter 2, Project Description and Section 2.5, Alternatives
Who is the applicant for this project, and who is responsible if there is an accident?	Chapter 2, Project Description

ES.6.2 Issues to Be Resolved

Section 15123(b)(3) of the State CEQA Guidelines requires that an EIR identify issues to be resolved. This includes the choice among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved regarding the proposed Project by the lead agency are whether:

- Any alternative should be approved instead of the proposed Project.
- Recommended mitigation measures should be adopted.
- The proposed Project should be approved.

ES.6.3 Responses to NOI/NOP

Table ES-4 identifies what their comment is, how it is addressed, and where to find the more complete response in the SEIS/SEIR.

ES.6.4 PCAC Issues Raised/Resolution

The Port Community Advisory Committee (PCAC) was established in 2001 as a standing committee of the Port of Los Angeles Board of Harbor Commissioners (Board). The PCAC provides a public forum to discuss Port-related quality of life issues through a series of subcommittees. These subcommittees provide guidance on environmental issues, review of EIRs, master planning, and Port redevelopment.

PCAC members commented on the proposed Project and the Draft SEIS/SEIR during the NOI/NOP period. Table ES-5 summarizes the main comments and issues raised by PCAC and also identifies where the issue is addressed within this document. If the comment or issue area is not addressed (e.g., it is outside the scope of this document), and thus remains an outstanding issue, this is noted in Table ES-5 as well.

Table ES-5. PCAC Comments/Issues Raised and Resolution

Comment Summary	*Where Addressed in the Draft SEIS/SEIR*	*Outstanding Issue?*
Capacity to store and transport additional crude oil, and effect on future supplies. Please compare the benefits to impacts.	Chapter 2, Project Description Chapter 3, Sections 3.1 through 3.15 Chapter 7, Socioeconomics	No

ES.6.5 Community Benefits Agreement

On December 6, 2007, the Port certified the Berth 136-147 [TraPac] Container Terminal EIR. The Berth 136-147 EIR was subsequently appealed to the Los Angeles City Council by a group of organizations and community members (the "TraPac Appellant Group [Appellant Group]"). On April 3, 2008, the Board of Harbor Commissioners approved a Memorandum of Understanding (MOU) with the

Appellant Group establishing a Community Benefits Agreement and recommended the MOU be forwarded to the Los Angeles City Council for approval. As part of the MOU, the Port agreed to meet with the Appellant Group on the Pacific L.A. Marine Terminal LLC Crude Oil Terminal Draft SEIR to discuss potential project impacts and mitigation measures.

The Port met with the Appellant Group on May 15, 2008 to discuss the proposed Project and the EIR analysis. The following is a summary of the major concerns/comments raised by the Appellant Group, with responses in italics:

1. Move the location of the proposed berth from Face C to Face E (the southeast side of Pier 400) for aesthetic, recreation and safety concerns.

   This alternative location is discussed in Section 2.5.3.2.10. This alternative was removed from consideration because of the need for additional dredging and disposal requirements, proximity to the least tern nesting site, and navigational issues. The project description has been modified to indicate that the proposed Project will not place new restrictions on recreational boating in the harbor.

2. Analyze the threat of explosions, fires and oil spills from the vessels, tanks, and pipelines, including proximity to the Vincent Thomas Bridge.

   These concerns are discussed in Section 3.12, "Risk of Upset and Hazardous Materials". In addition, the applicant will have to develop a comprehensive Spill Response Plan and adhere to a number of safety measures as part of the proposed Project, including equipping vessels and tanks with inert gas systems to prevent flammable vapor mixtures from forming. Some clarifications regarding hazards and vulnerable resources have been added to Section 3.12.

3. Analyze cumulative impacts, especially in regards to recreation and aesthetics.

   Cumulative impacts are discussed in Chapter 4. In regards to recreation, this analysis found that there is a cumulatively considerable impact to recreation as a result of past, present and future Port projects (Section 4.2.11) due to the potential for oil spills. However, proposed Project operations would not impede vessel travel lanes in the Main Channel, as discussed in Sections 3.9 and 3.11.4.3.1.2. The use of VLCCs and relatively short transit between the breakwater and Berth 408 would minimize the number of project-related ships transiting the area, and operations would not impede navigation of the Catalina Express, cruise ships, or pleasure craft in the Main Channel or other designated transit lanes, and thus, would not impact access to the Outer Harbor or open ocean.

4. Reduce industrial hardscape port-wide and increase efforts to green the Port.

   Aesthetics are discussed in Section 3.1. In addition, the proposed Project now includes a mitigation measure to plant trees around the facility (MM AQ-27) In addition, a programmatic measure will look at the color of the buildings at the site.

5. Increase AMP participation.

   This item may be discussed as part of the Final SEIS/SEIR. The AMP rates included in this analysis were determined based on technological and operational feasibility. In certifying the Final SEIR, the Board of Harbor Commissioners must also approve the "Findings of Fact", which would determine the final feasibility of all mitigation measures. If increased participation rates are found to be feasible based on new information, the Board could increase the rates as part of their approval.

6. Include mitigation measures in the lease and discuss enforcement and penalties considering noncompliance.

   New language has been provided to formalize this requirement in Section 2.1.1. Mitigation measures will be included in the lease.

7. Increase the number of mitigation measures, especially in regards to greenhouse gas emissions.

   If additional feasible mitigation measures are suggested as part of the comments received on the Draft SEIS/SEIR, the Port could add such measures to the Final SEIS/SEIR. This item will be discussed as part of the Final SEIS/SEIR. In certifying the Final SEIR, the Board of Harbor Commissioners must also approve the "Findings of Fact", which would determine the final feasibility of all mitigation measures. If increased participation rates are found to be feasible, the Board could increase the rates as part of their approval.

8. Incentivize increased mitigation percentages through lease rates.

   This issue is not precluded at this time. In addition, the lease will be a public document that must be approved by the Board of Harbor Commissioners.

9. Include penalties for mitigation measure non-compliance.

   Additional language has been added to Section 2.1.1. Enforcement of lease measures shall be through reporting, conformance actions, should deadlines be missed, and lease revocation where noncompliance cannot be remediated.

10. Include community-wide mitigation measures in the Draft EIS/EIR analysis to deal with cumulative/existing Port and off-Port impacts.

    Cumulative Impacts are discussed in Chapters 3 and 4. The proposed Project includes a number of mitigation measures aimed at reducing both project-specific and cumulative impacts.

In response to a number of the comments/concerns, changes were made throughout the document. As part of the MOU and standard Port outreach procedures, the Port will continue to meet with the Appellant Group to discuss the Draft SEIS/SEIR and proposed Project impacts and mitigation measures.