Chapter 1

Introduction

1.1 Final EIS/EIR Organization

This chapter presents background and introductory information for the Berths 212–224 Yusen Terminal International (YTI) Container Terminal Improvements Project (proposed Project), located in the industrial area of Terminal Island, within the Port of Los Angeles (Port). Additionally, this chapter discusses general changes and modifications made to the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR), which are mostly editorial in nature. Chapter 2, Response to Comments, presents information regarding the distribution of and comments on the Draft EIS/EIR, and the responses to these comments. Chapter 3, Modifications to the Draft EIS/EIR, presents the changes made to the text of the Draft EIS/EIR.

This Final EIS/EIR has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4341 et seq.) and in conformance with the Council for Environmental Quality (CEQ) Guidelines and the United States Army Corps of Engineers (USACE) NEPA Implementing Regulations. The document also fulfills the requirements of the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR] 15000 et seq.). USACE is the NEPA lead agency for this proposed Project, and the Los Angeles Harbor Department (LAHD) is the CEQA lead agency.

1.2 Project Overview

This section provides an overview of the proposed Project. A description of alternatives to the proposed Project is provided in Chapter 2 of the Draft EIS/EIR. YTI has a long-term lease with the Port for operation of the terminal through 2016 with an option to extend to 2026. YTI plans to exercise the option to extend its lease through 2026. The proposed project horizon year is 2026, the final year of the lease extension. The proposed project area encompasses approximately 185 acres at Berths 212–224 on Terminal Island. The existing terminal consists of two operating berths, Berths 212–213 and Berths 214–216, and one non-operating berth, Berths 217–220. Physical improvements proposed at the existing YTI Terminal include dredging and installing sheet piles and king piles at Berths 214–216 and Berths 217–220, adding and replacing/extending wharf gantry cranes, extending the 100-foot gauge crane rail along the wharf deck to Berths 217–220, improving/repairing backlands across the entire site, and adding a new operational rail track within the existing Terminal Island Container
Transfer Facility (TICTF) on-dock rail yard. All improvements would occur within the existing boundaries of the YTI Terminal. The proposed Project does not include physical improvements at Berths 221–224 except for resurfacing of backland areas. Improvements at Berths 212–213 would be limited to raising the height and extending the booms of cranes, and resurfacing backland areas. All dredged material would be disposed of at an approved site, such as the LA-2 Ocean Dredge Material Disposal Site (ODMDS) (LA-2), the Berths 243–245 confined disposal facility (CDF), or another approved location. After construction, the terminal would have three operating berths. These improvements would enable the terminal to accommodate the projected fleet mix of larger container ships (up to 13,000 twenty-foot equivalent units [TEUs]) that are anticipated to call at the terminal through 2026, and the capacity of the terminal would increase from 1,692,000 TEUs to 1,913,000 TEUs annually.

1.3 Existing Conditions

1.3.1 Regional Context

The Port Complex, which includes the Port of Los Angeles and the Port of Long Beach, is located in the San Pedro Bay approximately 20 miles south of downtown Los Angeles and serves as one of the nation’s primary gateways for international trade (Figure 2-1 in the Draft EIS/EIR). International trade is a key economic engine for the region and the country. The Port Complex serves as a vital link in the goods movement chain delivering goods for local markets as well as those shipped by truck and rail throughout the country. The Port Complex serves as the country’s primary gateway for Asian-based trading partners. Approximately half of the cargo coming through the Ports is delivered by truck to the regional market, which is an area roughly 500 to 700 miles from the Port Complex. The local freeways that directly serve the Port Complex are Interstate (I) 110, I-710, State Route (SR) 47, and SR-103. The Alameda Corridor is the primary rail line between the Port and downtown Los Angeles railyards (Union Pacific [UP] East LA Yard and Burlington Northern Santa Fe [BNSF] Hobart Yard). Other rail lines extend from the downtown area north and east.

1.3.2 Project Setting

The Port consists of 7,500 acres and 43 miles of waterfront and provides a major gateway for international goods and services. The Port is administered by LAHD under the California Tidelands Trust Act of 1911. LAHD is chartered to develop and operate the Port to benefit maritime uses, and it functions as a property owner by leasing Port properties to more than 300 tenants. With 23 major cargo terminals, including dry and liquid bulk, container, breakbulk, automobile, and passenger facilities, the Port handled about 158 million metric revenue tons of cargo in fiscal year 2011/2012 (July 2011–June 2012) (POLA 2012). Of the 23 major cargo terminals, nine are container terminals and include 85 container cranes. In addition to cargo business operations, the Port is home to commercial fishing vessels, a shipyard, a boat repair facility, and recreational, community, and educational facilities.
1.3.3 Project Site and Surrounding Uses

The proposed project site encompasses a total of approximately 185 acres, including the YTI Terminal and a portion of the TICTF. The berths and container yard occupy approximately 157 acres, YTI’s portion of the TICTF on-dock rail is approximately 24 acres, and an additional 4 acres located to the south of the main terminal are unused. The site is generally bounded on the north by confluence of the Cerritos and East Basin Channels, SA Recycling at Berths 210–211 to the east, Seaside Avenue and SR-47 to the south, and the East Basin Channel to the west (Figure ES-2 in the Draft EIS/EIR). Four bridges provide vehicular and rail access to Terminal Island from the mainland: the Vincent Thomas Bridge, the Schuyler Heim Bridge, the Gerald Desmond Bridge, and the Badger Avenue Railroad Lift Bridge.

Land uses in the proposed project vicinity support a variety of cargo handling operations, including container, liquid bulk, and dry bulk, as well as commercial fishing, seafood processing, and maritime support. To the southwest at Berths 226–236 is the Evergreen/STS container terminal, with whom YTI shares the TICTF on-dock railyard; the U.S. Customs Building is to the south of the proposed project area; the Navy Reserve Center former site is to the southeast; the Shell Liquid Bulk Terminal at Berths 167–169 and the Pasha Breakbulk Terminal at Berths 174–181 are across the East Basin Channel to the north; and the Vopak Liquid Bulk Terminal at Berths 187–191 is across Cerritos Channel to the north.

1.3.4 Historic Use of the Project Site

Berths 212–224 have a rich history dating back to the late 1920s, serving a variety of tenants including oil companies, lumber companies, shipbuilding and dismantling operations, and cargo terminals.

The first facilities at Berths 212–214 were originally constructed in the 1920s. From about 1941 through 1945, during World War II, California Shipbuilding Company (Calship) manufactured Liberty- and Victory-class transports at the site. Calship was the largest wartime shipbuilder in Los Angeles Harbor during World War II. Following the war, Calship was acquired by the National Metal and Steel Corporation, which was the final destination for many decommissioned U.S. Navy ships to be dismantled and exported as scrap metal.

Fellows and Stewart, a yacht builder, also occupied Berth 214 from 1949 through 1976, at which point Al Larson Boat Shop took over the site from 1977 through the mid-1980s. Al Larson Boat Shop was used for boat cleaning, painting, repair, refitting, and boat building. Proctor and Gamble also occupied a portion of the Berth 214 backland for warehousing operations from about 1961 through the mid-1980s.

Berth 215 once housed a liquid bulk transfer/storage facility and included oil storage tanks, office, storage, and pump buildings. Hancock Oil occupied Berth 215 from 1928 through 1958, when it was sold to Signal Oil. Signal Oil continued operations at the site until about 1965, at which time Gulf Oil took over the site and operated until the mid-1980s. Quaker oil also operated on the backlands portion of Berth 215 from about 1965 through 1980.
As early as 1927, Berths 216–217 were occupied by California Petroleum Corporation. Around 1929, the Texas Company (now Texaco) began operations at Berths 216–218 and remained on site until about 1968. Berths 216–218 were vacant for several years before Dow Chemical occupied a portion of the backlands until the mid-1980s. The Western Walker Company also occupied a portion of the backlands at Berths 216–218 from about 1929 through 1932.

Hammon Lumber Company operated at Berths 220–224 from about 1927 through about 1963, at which point this portion of the site began to operate as a cargo terminal. Berths 220–224 continued operations as a container terminal, and Indies Cargo Terminal expanded the cargo operations to include Berths 216–218 around 1985. YTI began operation at Berths 211–215 in 1990 and took over operation of Berths 216–224 in 1996.

1.4 Project Purpose

LAHD operates the Port under the legal mandates of the Port of Los Angeles Tidelands Trust (Los Angeles City Charter, Article VI, Section 601) and the California Coastal Act (PRC Division 20 Section 700 et seq.), which identify the Port and its facilities as a primary economic and coastal resource of the State of California and an essential element of the national maritime industry for the promotion of commerce, navigation, fisheries, and Harbor operations. Activities should be water dependent and LAHD must give highest priority to navigation, shipping, and necessary support and access facilities to accommodate the demands of foreign and domestic waterborne commerce. LAHD is chartered to develop and operate the Port to benefit maritime uses, and it functions as a landlord by leasing Port properties to more than 300 tenants.

1.4.1 CEQA Objectives

The overall proposed project objective is to optimize the container-handling efficiency and capacity of the Port to accommodate the projected fleet mix of larger container vessels (up to 13,000 TEUs) that are anticipated to call at the YTI Terminal through 2026. To meet the proposed project objective, the following more detailed objectives need to be met:

- optimize the use of existing land at the YTI Terminal and associated waterways in a manner that is consistent with LAHD’s tidelands trust obligations;
- provide sufficient water depth to ensure the terminal’s ability to accommodate larger container ships of up to 13,000 TEUs that are anticipated to call at the terminal through 2026;
- improve the container terminal berthing facilities at the YTI Terminal to accommodate the berthing and loading/unloading of the larger ships up to 13,000 TEUs that are anticipated to call at the terminal through 2026;
- increase on-dock rail facilities to accommodate projected daily peak increases in container movement into and out of the YTI Terminal resulting from the handling of larger ships; and
- improve the container terminal backlands to minimize ongoing needs for pavement repair and maintenance.
1.4.2 NEPA Purpose and Need

The purpose of the proposed Project is to improve maritime shipping and commerce by upgrading container terminal infrastructure in, over, and under water and on terminal backlands to accommodate the projected fleet mix of larger container ships (up to 13,000 TEUs) that are anticipated to call at the YTI Terminal through 2026. The proposed Project would optimize the terminal’s efficiency and would improve maritime shipping and commerce. This would be accomplished through dredging to deepen two berths at the terminal, including the addition of subsurface king piles and sheet piles to stabilize the existing wharf structure, replacing or extending gantry cranes, extending the 100-foot gauge crane rail along the wharf deck to Berths 217–220, and adding a new operational rail track within the existing TICTF on-dock rail yard.

The proposed Project is needed for several reasons, primarily related to projected increases in the size of vessels in the fleet mix throughout the life of the proposed Project. Forecasts show that vessel fleets calling at the YTI Terminal will include larger vessels (up to 13,000 TEUs). The existing berths that would be upgraded as part of the proposed Project are currently dredged to -45 feet Mean Lower Low Water (MLLW) but are not deep enough to accommodate the projected fleet mix through 2026. The deepest existing berth can only accommodate 8,500 TEU vessels. In addition to depth restrictions, the majority of the existing cranes and crane infrastructure cannot accommodate the larger vessels. The existing 50-foot gauge crane rail at Berths 217–220 is not of sufficient size or gauge to accommodate the type and size of cranes capable of efficiently loading and unloading the existing fleet mix calling at the terminal or the larger container ships expected to call through 2026. Currently, all operating cranes have a 100-foot width between the rails. A temporary 100-foot gauge rail extends partially onto Berths 217–220 to allow cranes to be moved out of the way for storage, but the temporary crane rail lacks the structural integrity to support operating cranes. Only four of the existing 14 cranes at the terminal are tall enough and have an outreach long enough to load and off-load the largest vessels anticipated to call at the terminal. Also, the TICTF on-dock rail yard at the YTI Terminal does not have the capacity to efficiently accommodate an increase in peak container volumes associated with larger container ships calling at the terminal. Consequently, an additional operational on-dock rail track is needed. Finally, the YTI Terminal container yard backlands are deteriorating and in need of repair and strengthening to prevent further damage to equipment and pavement throughout the life of the proposed Project.

1.4.3 Federal Scope of Analysis

In general, the scope of federal review for evaluating the potential impacts of a proposed project is focused on those aspects of the project that affect federal agency jurisdiction. USACE has jurisdiction over activities affecting navigable waters and other waters of the United States, as well as any transport of dredged material for the purpose of ocean disposal.

As presented in Section 1.5.1 of the Draft EIS/EIR, under federal law, “the District Engineer should establish the scope of the NEPA document to address the impacts of the specific activity requiring the Department of the Army (DA) permit and those portions of

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1 Mean Lower Low Water is the average height of the lowest tide recorded at a tide station each day during the recording period.
the entire project over which the District Engineer has sufficient control and responsibility to warrant Federal review” (33 Code of Federal Regulations (CFR) Part 325, Appendix B).

USACE regulations also identify four factors to be considered in determining “sufficient control and responsibility,” which include:

1) whether or not the regulated activity represents merely a link in a corridor-type project;
2) whether there are aspects of the upland facility in the immediate vicinity of the regulated activity that affect the location and configuration of the regulated activity;
3) the extent to which the entire project would be within USACE jurisdiction; and
4) the extent of cumulative federal control and responsibility.

With respect to the first factor, the proposed Project is a container terminal improvement project, which consists of dredging, wharf improvements, overwater cranes, backlands, and rail infrastructure. Thus, it is not “merely a link” in a corridor-type project, such as a highway or a utility line crossing.

Considering the second factor, as the YTI Terminal is an existing container terminal in the Port, there is a physical link between the upland container yard/backlands and the adjacent wharves and associated cranes in and over waters of the United States that support YTI’s operations. While this factor might suggest expanding the scope of analysis to include the upland container yard/backlands, the existing YTI Terminal is a fully functioning container terminal that has been operating at this location for many years, and, as such, many of the upland/backland impacts that would or could occur at the site under the proposed Project represent non-jurisdictional activities or operations and the resultant impacts could occur regardless of whether USACE’s regulated activities, as proposed, are authorized.

In evaluating the third factor, the extent of waters of the United States that would be affected by the proposed Project represents a relatively small portion of the approximately 185-acre proposed project area. The proposed dredging at Berths 214–216 would impact approximately 70,000 square feet, and the dredging at Berths 217–220 would impact approximately 60,000 square feet of navigable waters of the United States.

For the fourth factor, other than the requirement to obtain the USACE permit, there is no other federal involvement on this site that would warrant broadening the federal scope of analysis, such as use, transfer, or sale of federal property; federal funding including cost sharing, guarantee, or financial assistance; or impact to federally listed historic resources, threatened or endangered species, designated critical habitat, or other federally recognized natural resources. There is also no other federal agency that controls the environmental effects of land development on the upland portions of the proposed project area, and state and local regulations would control the design of the proposed Project.

Further, the federal and non-federal portions of the proposed Project could take place independently of each other. In summary, the environmental consequences of the whole proposed Project would not be essentially products of the federal action. Rather, they would be primarily the product of non-federal interest and designs.
Based on USACE regulations, including the four factors at 33 CFR 325, Appendix B, the appropriate scope of analysis for the federal action consists of permanent and temporary, direct and indirect impacts to waters of the United States associated with dredging, dredged material disposal, installation of subsurface king piles and sheet piles, wharf improvements, crane extension and/or replacement, and construction-related activities in uplands within the scope of federal control that would take place within 100 feet of the water’s edge and are required to complete work and structures in waters of the United States, such as extension of the 100-foot crane rail (i.e., actions directly traceable to the proposed in/over/under water work and structures). Figure 2-10 in the Draft EIS/EIR shows the USACE permit area considered in the federal scope of analysis.

Based on the information provided by the proposed project proponent, USACE has also identified potentially significant cumulative impacts that would occur in conjunction with the proposed Project (i.e., federal and non-federal, past, present, and reasonably foreseeable projects in the vicinity of the Port). Therefore, USACE prepared an EIS for the proposed Project and its alternatives. While operational impacts in the uplands would occur outside the jurisdiction and permit authority of USACE, NEPA requires USACE to disclose all potentially significant direct, indirect, and cumulative impacts occurring as a result of a proposed permit action. Significance of the proposed Project or alternative under NEPA is defined by comparing the impacts of the proposed Project or alternative to the NEPA baseline (i.e., increment). This represents the incremental difference between implementation of the proposed Project or alternative and the future conditions that are likely to occur without federal action, in this case, the issuance of the USACE permit. The USACE permit decision would focus on direct and indirect impacts to the aquatic environment.

1.5 Proposed Project

This section describes the proposed improvements on the YTI Terminal, the anticipated construction phasing, and the anticipated terminal operations once the improvements are completed.

1.5.1 Proposed Project Elements

1.5.1.1 Overview

The proposed Project would be constructed in two phases over an approximately 22-month period, and is expected to begin in mid-2015. Phase I is expected to last approximately 12 months and would consist of deepening Berths 217–220 (including installation of sheet piles), extending the 100-foot gauge crane rail, expanding the TICTF, relocating two Port-owned cranes, relocating and realigning two YTI cranes, delivering and installing up to four new cranes, raising and extending up to six YTI cranes, and conducting backland surface improvements. Phase II is expected to take approximately 10 months and would involve deepening Berths 214–216 (including installation of king piles and sheet piles) and conducting backland surface improvements. No physical changes would occur at Berths 221–224 except for paving work in the backland area.

The improvements to Berths 217–220, including the extension of the 100-foot gauge crane rail, would add a new operating berth at the YTI Terminal (currently at two operating berths, three after implementation of the proposed Project).
Below is a summary of the improvements that would occur at the terminal, with more detailed descriptions following.

- extending the height and outreach of up to six existing cranes;
- replacing up to four existing non-operating cranes;
- dredging and installing sheet piles and king piles at Berths 214–216 and 217–220;
- extending the existing 100-foot gauge landside crane rail to Berths 217–220;
- performing ground repairs and maintenance activities in the backlands area; and
- expanding the TICTF on-dock rail by adding a single operational rail track.

1.5.1.2 Terminal Improvements

Dredging and Pilings

The proposed improvements to Berths 214–216 include: (1) dredging to increase the depth from -45 to -53 feet MLLW (with an additional two feet of overdredge depth, for a total depth of -55 feet MLLW); and (2) installing sheet piles and king piles to accommodate the dredging activities and help to support and stabilize the existing wharf structure. Dredging would remove approximately 21,000 cubic yards (cy) of sediment from the berth. The king piles would be installed approximately 35 feet below the mudline and the sheet piles would be installed 15 feet below the mudline, across approximately 1,400 linear feet along the berth.

The proposed improvements at Berths 217–220 would include dredging to increase the depth from -45 to -47 feet MLLW (with an additional two feet of overdredge depth, for a total depth of -49 feet MLLW). Dredging would require the removal of approximately 6,000 cy of sediment. Sheet piles would be installed approximately 15 feet below the mudline and across approximately 1,200 linear feet along the berth.

All of the dredged material, approximately 27,000 cubic yards, would be disposed of at an approved site, which may include the LA-2 ocean disposal site, the Berths 243–245 CDF, or another approved location. A sediment characterization study was performed at Berths 212–224 in 2014 to determine the suitability of sediments from the proposed dredge footprint for unconfined aquatic disposal (AMEC 2014). Testing indicated that the majority of sediments within the Berths 212–224 footprint complied with the chemistry, toxicity, and bioaccumulation suitability requirements for ocean disposal (Title 40 CFR Parts 220–228), with some higher levels associated with unconsolidated surface (top-layer) sediments at Berths 214–216. Therefore, the majority of dredged material (21,800 cubic yards) would be suitable for placement at LA-2, and approximately two feet of surface sediments from Berths 214–216 (5,200 cubic yards) would be placed within the Berths 243–245 CDF or another upland location.

Crane Extension/Replacement

Currently, there are 10 operating wharf cranes (14 cranes total) at the terminal. Under the proposed Project, there would be up to 14 operating cranes and two non-operating cranes. The proposed Project includes raising and increasing the outreach of some of the existing cranes and replacing some existing cranes with super post-Panamax cranes. The four
existing largest super post-Panamax cranes (cranes 5–8) would remain and would not be
modified. Up to six existing cranes (cranes 1–4 and 9–10) would be raised, and the
booms would be extended to match the size of the four largest cranes (197 feet) to
accommodate loading and unloading of 22-container-wide cargo vessels. A maximum of
four new super post-Panamax cranes would be added to replace smaller cranes at the YTI
Terminal. The existing non-operating cranes (cranes 11–12) would be moved to the far
end of Berths 217–220 and stored for non-use. Additionally, the existing non-operating
cranes owned by the Port (cranes P18–P19) would be relocated off site. The cranes are
designed to move along the wharves and would be located where needed to efficiently
load and unload vessels.

Extension of Wharf Crane Rail
The existing 100-foot gauge landside crane rail at Berths 212–216 would be extended by
approximately 1,500 feet to accommodate 100-foot gauge cranes at Berths 217–220.
Approximately 1,500 linear feet of existing 1,000-amp crane bus bar would be replaced
with a new 1,500-amp system to provide power to the 100-foot gauge cranes.

Backland Improvements
Backland improvements would occur on approximately 160 acres of the 185-acre
terminal and would consist of ground repairs and maintenance activities involving slurry
sealing, deep cold planing, asphalt concrete overlay, construction of approximately 5,600
linear feet of concrete runways for rubber tire gantry (RTG) cranes, restriping, and
possible removal/relocation/modification of underground conduits and pipes, as needed
to accommodate the repairs.

TICTF Improvements
Expansion of the TICTF on-dock railyard would include the addition of a single 3,200-
linear-foot operational rail loading track, including two turnouts, and reconstruction of a
portion of the container terminal backlands to accommodate the rail expansion. These
improvements would involve grading, paving, lighting, drainage, utility
relocation/modifications, striping, relocation of an existing fence, and third-party utility
modifications, relocations, or removals, as needed. The relocation of the fence would
move approximately five acres from the YTI Terminal backlands to the TICTF.

1.5.3 Project Construction Phasing and Schedule
The proposed Project would be constructed in two phases: Phase I is expected to take
approximately 12 months beginning in mid-2015, and Phase II is expected to take
approximately 10 months beginning in mid-2016. During Phase I of construction,
Berths 212–213 and Berths 214–216 would remain in operation. During Phase II of
construction, Berths 212–213 and the newly improved Berths 217–220 would be in
operation.

1.5.2 Proposed Project Operations

1.5.2.1 Lease Amendment
As part of the proposed Project, YTI would exercise the option to extend its lease for an
additional ten-year period to 2026. The option to extend the term of the lease is included
in YTI’s current Permit No. 692. Therefore, no permit amendment would be required for exercising this option. However, all mitigation measures, lease measures, and standard conditions included in this document for which YTI is responsible would be incorporated into Permit No. 692 through a lease amendment, and compliance would be enforced through the lease.

1.5.2.2 Terminal Operations

The YTI Terminal would continue operating as a container terminal similar to existing conditions. At this time, no foreseeable changes in the type of operations are expected through 2026.

Anticipated Throughput

The proposed Project would improve the container-handling efficiency of the existing YTI Terminal at the Port to accommodate the projected fleet mix of larger container vessels (up to 13,000 TEUs) that are anticipated to call at the YTI Terminal through 2026. The proposed Project would increase the throughput capacity of the YTI Terminal from 1,692,000 TEUs to 1,913,000 TEUs annually. The Draft EIS/EIR appropriately accounts for projected growth at the terminal up to its physical capacity limitations of the terminal to represent a worst-case scenario and to ensure all potential environmental impacts are disclosed. The Draft EIS/EIR analyzes the proposed Project at capacity in 2026 with the throughput ramping up in interim study years (2015, 2017, and 2020). The actual throughput levels for the proposed Project may be lower than the projected throughput at capacity as analyzed in the Draft EIS/EIR due to market conditions.

Ship Operations

Currently, the terminal can service up to three smaller vessels concurrently at the two operating berths. After construction of the proposed Project, up to two larger vessels and one smaller vessel could be berthed concurrently at the three operating berths. At the throughput capacity of approximately 1,913,000 TEUs, the terminal is anticipated to receive 206 ship calls by 2026, along with associated tugboats, which are used to safely guide container ships in and out of the harbor.

Rail Operations

Under the proposed Project, the volume of cargo passing through YTI’s portion of the TICTF on-dock railyard is expected to increase from 347,405 TEUs in 2012 to 669,550 TEUs by 2026. The additional 3,200-foot rail track would increase the capacity of the YTI portion of TICTF from 567,000 TEUs to 680,400 TEUs, providing sufficient capacity to handle the full amount of anticipated demand for on-dock rail facilities associated with maximum terminal throughput. The percentage of terminal throughput that would be handled by on-dock rail is expected to remain at 35%. Loading, unloading, and hauling of rail cars would occur as it does under existing conditions.

In addition to transportation of cargo by on-dock rail, draying of containers to near- and off-dock facilities would continue to occur under the proposed Project, just as it occurs under existing conditions. Generally, trains are composed of containers that are all destined for one location. Where there is not a sufficient number of containers destined for the same location to make up a train, those containers are hauled to near- and off-dock facilities to be grouped with containers from other terminals bound for that same location.
destination. Trucks would haul those containers on public highways to and from off-dock railyards, including the UP Carson ICTF, the BNSF Hobart Yard in Vernon, the UP East Los Angeles Yard, and the proposed BNSF Southern California International Gateway. Local and national (long-haul) containers would be hauled to and from the terminal gates by trucks.

**Truck Operations**

Based on the anticipated mode splits for the proposed Project, the throughput capacity of 1,913,000 TEUs in 2026 would require a total of 4,470 peak daily and 1,236,402 annual truck trips. Of the approximately 1,243,450 TEUs transported by trucks in 2026, approximately 95,650 TEUs (approximately 5%) would be intermodal cargo trucked to off-dock railyards.

**Cargo-handling Equipment**

The existing types of cargo handling yard equipment are not expected to change as part of the proposed Project. As throughput increases, equipment may be added. In addition, yard equipment would be replaced or modified as needed to comply with California Air Resources Board (CARB) requirements as new requirements take effect.

**Terminal Operating Hours**

The terminal operating hours are not expected to change from existing conditions. The number of employees working at the terminal is expected to increase from a peak daily total of 533 in 2012 to approximately 845 in 2026. The terminal is run as a continuous operation, in which more employees are hired to supplement operations as needed.

### 1.6 Port of Los Angeles Environmental Initiatives

LAHD’s Environmental Management Policy, as described in this section, was approved by the Harbor Commission on April 27, 2003. The purpose of the Environmental Management Policy is to provide an introspective, organized approach to environmental management; further incorporate environmental considerations into day-to-day Port operations; and achieve continual environmental improvement.

The Environmental Management Policy includes existing environmental initiatives for LAHD and its customers, such as the voluntary Vessel Speed Reduction Program (VSRP), Source Control Program, Least Tern Nesting Site Agreement, Hazardous Materials Management Policy, and the Clean Engines and Fuels Policy. In addition, the Policy encompasses initiatives such as the Environmental Management System (EMS) with LAHD’s Construction and Maintenance Division and a Clean Marina Program. These programs are Port-wide initiatives to reduce environmental pollution. Many of the programs relate to the proposed Project. The following discussion includes details on a number of the programs and their goals.
1.6.1 LAHD’s Environmental Policy

LAHD is committed to managing resources and conducting Port developments and operations in an environmentally and fiscally responsible manner. LAHD strives to improve the quality of life and minimize the impacts of its development and operations on the environment and surrounding communities. This is done through the continuous improvement of its environmental performance and the implementation of pollution-prevention measures, in a feasible and cost-effective manner that is consistent with LAHD’s overall mission and goals and with those of its customers and the community.

To ensure this policy is successfully implemented, LAHD will develop and maintain an environmental management program that will:

- ensure that environmental policy is communicated to LAHD staff, its customers, and the community;
- ensure compliance with all applicable environmental laws and regulations;
- ensure that environmental considerations include feasible and cost-effective options for exceeding applicable regulatory requirements;
- define and establish environmental objectives, targets, and best management practices (BMPs), and monitor performance;
- ensure LAHD maintains a Customer Outreach Program to address common environmental issues; and
- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations through environmental awareness and communication with employees, customers, regulatory agencies, and neighboring communities.

LAHD is committed to the spirit and intent of this policy and the laws, rules, and regulations, which give it foundation.

1.6.2 Environmental Plans and Programs

LAHD has implemented a variety of plans and programs to reduce the environmental effects associated with operations at the Port. These programs include the San Pedro Bay Port Complex Clean Air Action Plan (CAAP), Water Resources Action Plan (WRAP), deepening the channels of the Port to accommodate larger and more efficient ships, and converting to electric and alternative-fuel vehicles. All of these efforts ultimately reduce environmental effects.

1.6.2.1 Clean Air Action Plan

The Ports of Los Angeles and Long Beach, with the participation and cooperation of the staff of the U.S. Environmental Protection Agency (EPA), CARB, and South Coast Air Quality Management District (SCAQMD), prepared the San Pedro Bay Port Complex CAAP, a planning and policy document that sets goals and implementation strategies to reduce air emissions and health risks associated with Port operations while allowing Port development to continue. In addition, the CAAP sought the reduction of criteria pollutant emissions to the levels that assure Port-related sources decrease their “fair share” of regional emissions to enable the South Coast Air Basin to attain state and...
federal ambient air quality standards. Each individual CAAP measure is a proposed strategy for achieving these emissions reductions goals. The Ports approved the first CAAP in November 2006. Specific strategies to significantly reduce the health risks posed by air pollution from Port-related sources include:

- aggressive milestones with measurable goals for air quality improvements;
- specific goals set forth as standards for individual source categories to act as a guide for decision-making;
- recommendations to eliminate emissions of ultrafine particulates;
- technology advancement programs to reduce greenhouse gases; and
- public participation processes with environmental organizations and the business communities.

The CAAP focuses primarily on reducing diesel particulate matter (DPM), along with nitrogen oxide (NO\textsubscript{X}) and sulfur oxides (SO\textsubscript{X}). This reduces emissions and health risk and thereby allows for future Port growth while progressively controlling the impacts associated with growth. The CAAP includes emission control measures as proposed strategies that are designed to further these goals expressed as Source-Specific Performance Standards which may be implemented through the environmental review process, or could be included in new leases or Port-wide tariffs, Memoranda of Understanding (MOU), voluntary action, grants, or incentive programs.

The CAAP Update, adopted in November 2010, includes updated and new emission control measures as proposed strategies that support the goals expressed as the Source-Specific Performance Standards and the Project-Specific Standards. In addition, the CAAP Update includes the recently developed San Pedro Bay Standards, which establish emission and health risk reduction goals to assist the Ports in their planning for adopting and implementing strategies to significantly reduce the effects of cumulative Port-related operations.

The goals set forth as the San Pedro Bay Standards are the most significant addition to the CAAP and include both a Bay-wide health risk reduction standard and a Bay-wide mass emission reduction standard. Ongoing Port-wide CAAP progress and effectiveness will be measured against these Bay-wide Standards, which consist of the following reductions as compared to 2005 emissions levels:

- Health Risk Reduction Standard: 85% reduction in DPM by 2020
- Emission Reduction Standards:
  - by 2014, reduce emissions by 72% for DPM, 22% for NO\textsubscript{X}, and 93% for SO\textsubscript{X}
  - by 2023, reduce emissions by 77% for DPM, 59% for NO\textsubscript{X}, and 92% for SO\textsubscript{X}

The Project-Specific Standard remains as adopted in the original CAAP in 2006, that new projects meet the 10 in 1,000,000 excess residential cancer risk threshold, as determined by health risk assessments conducted subject to CEQA statutes, regulations, and guidelines, and implemented through required CEQA mitigations and/or lease negotiations. Although each Port has adopted the Project-Specific Standard as a policy,
the Board of Harbor Commissioners retain the discretion to consider and approve projects that exceed this threshold if the Board deems it necessary by adoption of a statement of overriding considerations at the time of project approval.

The Draft EIS/EIR analysis assumes compliance with applicable CAAP control measures. Proposed project-specific mitigation measures applied to reduce air emissions and public health impacts are consistent with the emission-reduction strategies of the CAAP.

### 1.6.2.2 Water Resources Action Plan

Both LAHD and the Port of Long Beach face ongoing challenges from contaminants that remain in Port sediments, flow into the harbor from Port land, and flow from upstream sources in the watershed, well beyond the Ports’ boundaries. Therefore, the Ports undertook a collaborative, scientific effort to address existing and potential sources of water and sediment pollution. Building on the collaborative model developed by the CAAP, under the WRAP the Ports will continue to work together and with other stakeholders to achieve further progress in water and sediment quality improvement. The WRAP establishes a program of water quality improvement measures necessary to achieve the goals and targets that will be established by the Los Angeles RWQCB in upcoming regulations. The WRAP targets the four basic types of potential sources of pollutants to harbor waters (land use discharges, on-water discharges, sediments, and watershed discharges) and includes control measures zeroing in on known and potential sources of water and sediment contamination in the harbor area (POLA/POLB 2009).

### 1.6.2.3 Port of Los Angeles Sustainable Construction Guidelines

LAHD adopted the Port of Los Angeles Sustainable Construction Guidelines in February 2008 and revised them in November of 2009. The guidelines are used to establish air emission criteria for inclusion in bid specifications for construction. The guidelines reinforce and require sustainability measures during performance of the contracts, balancing the need to protect the environment, be socially responsible, and provide for the economic development of the Port. Future resolutions are anticipated to expand the guidelines to cover other aspects of construction, as well as planning and design. These guidelines support the Port Sustainability Program.

The intent of the guidelines is to facilitate the integration of sustainable concepts and practices into all capital projects at the Port and to phase in the implementation of these procedures in a practical, yet aggressive, manner (LAHD 2009). These guidelines are made a part of all construction specifications advertised for bids.

Significant features of the guidelines include, but are not limited to:

- all ships and barges used primarily to deliver construction-related materials for LAHD construction contracts shall comply with the VSRP and use low-sulfur fuel within 40 nautical miles of Point Fermin;
- harbor craft shall meet EPA Tier-3 engine emission standards;
- all dredging equipment shall be electric;
- on-road heavy-duty trucks shall comply with EPA 2007 on-road emission standards for inhalable particulate matter (PM$_{10}$) and NO$_X$;
1. construction equipment (excluding on-road trucks, derrick barges, and harbor craft) shall meet Tier 3 emission off-road standards; the requirement will be raised to Tier 4 by January 1, 2015; in addition, construction equipment shall be retrofitted with a CARB-certified Level 3 diesel emissions control device;

2. equipment will comply with SCAQMD Rule 403 regarding fugitive dust, and other fugitive dust control measures; and

3. additional Best Management Practices, based largely on Best Available Control Technology (BACT), will be required on construction equipment (including on-road trucks) to reduce air emissions further.

1.6.2.4 Other Environmental Programs

Air Quality

Alternative Maritime Power. AMP reduces emissions from container vessels docked at the Port. Normally, ships shut off their propulsion engines when at berth, but use auxiliary diesel engines to power electrical needs such as lights, pumps, and refrigerator units. These engines emit an array of pollutants, primarily NOX, SOX, and particulate matter (PM_{10} and PM_{2.5}). The Port is in the process of providing shore-based electricity as an alternative to running the auxiliary engines (a process also referred to as cold ironing). The AMP program allows ships to “plug in” to shoreside electrical power while at dock instead of using on-board engines, a practice that will dramatically reduce emissions. Before being used at the Port, AMP was used commercially only by the cruise ship industry in Juneau, Alaska. Now, AMP facilities have been installed and are currently in use at China Shipping Terminal, Yusen Terminal, Evergreen Terminal, TraPac Terminal, Yang Ming Terminal, APL Terminal, APM Terminal, California United Terminals, and the Cruise Ship Terminal. AMP has been incorporated into the CAAP as a project-specific measure.

Off-Peak Program. Extending cargo terminal operations by five night and weekend work shifts, the Off-Peak Program, managed by PierPASS (an organization created by marine terminal operators) has been successful in increasing cargo movement, reducing the waiting time for trucks inside Port terminals, and reducing truck traffic during peak daytime commuting periods.

On-Dock Rail and the Alameda Corridor. Use of rail for long-haul cargo is acknowledged as an air quality benefit. Four existing on-dock railyards at the Port, including the existing TICTF on-dock facility on the proposed project site (another two on-dock yards are proposed—refer to Figure 1-7 in the Draft EIS/EIR), significantly reduce the number of short-distance truck trips (the trips that normally would convey containers to and from off-site railyards). Combined, these intermodal facilities eliminate an estimated 1,400,000 truck trips per year and the emissions and traffic congestion that go along with them. A partner in the Alameda Corridor project, LAHD is using the corridor to transport cargo to downtown railyards at 10 to 15 miles per hour faster. Use of the Alameda Corridor allows cargo to travel the 20 miles to downtown Los Angeles at a faster pace and promotes the use of rail versus truck. In addition, the Alameda Corridor eliminates 200 rail/street crossings and emissions produced by cars with engines idling while the trains pass.
**Tugboat Retrofit Project.** The engines of several tugboats in the Port were replaced with ultra-low-emission diesel engines. This was the first time such technology had been applied to such a large engine. Emissions testing showed a reduction of more than 80 tons of NOX per year, nearly three times better than initial estimates. Under the Carl Moyer Program, the majority of tugboats operating in the Port Complex have been retrofitted.

**Electric and Alternative Fuel Vehicles.** LAHD has converted more than 35% of its fleet to electric or alternative-fuel vehicles. These include heavy-duty vehicles and passenger vehicles. LAHD proactively has embarked on the use of emulsified fuels that are verified by CARB to reduce diesel particulates by more than 60% compared to diesel-powered equipment.

**Electrified Terminal Operating Equipment.** The 85 ship-loading cranes currently in use at the Port operate under electric power. In addition, numerous other terminal operations equipment has been fitted with electric motors.

**Yard Equipment Retrofit Program.** Over the past five years, diesel oxidation catalysts have been applied to nearly all yard tractors at the Port. This program has been carried out with Port funds and funding from the Carl Moyer Program.

**Vessel Speed Reduction Program.** Under this voluntary program, oceangoing vessels slow to 12 knots within 20 to 40 nautical miles of the entrance to Los Angeles Harbor, thus reducing emissions from main propulsion engines. Currently, approximately 94% of ships comply with the voluntary program within 20 nautical miles and 79% comply within 40 nautical miles.

**Greenhouse Gas Reduction.** Under a December 2007 agreement with the Attorney General’s office, LAHD conducts annual comprehensive inventories of Port-related greenhouse gas emissions, tracking these emissions from their foreign sources to domestic distribution points throughout the United States. LAHD reports this data annually to the California Climate Action Registry. The annual reports include emissions of all ships bound to and from the Port terminals, encompassing points of origin and destination; emissions of all rail transit to and from Port terminals, encompassing major rail cargo destination and distribution points in the United States; and emissions of all truck transit to and from Port terminals, encompassing major truck destinations and distribution points. The Port-wide inventory will be conducted annually until Assembly Bill (AB) 32 regulations become effective. Under the agreement, LAHD will also construct a 10-megawatt photovoltaic solar system to offset approximately 17,000 metric tons of carbon dioxide equivalent annually. In addition to the agreement with the Attorney General, many of the environmental programs described in this section (such as the Green Terminal Program, the Recycling Program, the Green Ports Program, and all of the air quality improvement programs described above) will serve to reduce greenhouse gas emissions.

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2 The Carl Moyer Program is a grant program implemented by CARB and administered by SCAQMD to fund the incremental cost of cleaner-than-required engines.

3 The California Global Warming Solutions Act of 2006, also known as AB 32, requires CARB to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with the program. In general, the bill requires CARB to reduce statewide greenhouse gas emissions to the equivalent of those in 1990 by 2020.
Water Quality

Clean Marinas Program. To help protect water and air quality in the harbor, LAHD developed a Clean Marinas Program. The program advocates that marina operators and boaters use BMPs—environmentally friendly alternatives to some common boating activities that could cause pollution or contaminate the environment. The program also includes several innovative clean water measures unique to the Port. The Clean Marinas Program features voluntary components and measures required through Port leases, CEQA mitigation requirements, or established federal, state, and local regulations.

Water Quality Monitoring. LAHD has been monitoring water quality at 31 established stations in San Pedro Bay since 1967, and the water quality today at the Port is among the best of any industrialized port in the world. Samples are tested on a monthly basis for dissolved oxygen, biological oxygen demand, and temperature. Other observations are noted, such as odor and color, as well as the presence of oil, grease, and floating solids. The overall results of this long-term monitoring initiative show the tremendous improvement in harbor water quality that has occurred over the last four decades.

Inner Cabrillo Beach Water Quality Improvements. The Port is one of the few industrial ports in the world to have a swimming beach. Inner Cabrillo Beach provides quiet water for families with small children. However, in recent years, upland runoff has resulted in high levels of bacteria in shoreline waters. LAHD has invested hundreds of thousands of dollars in water circulation/quality models and studies to investigate the problem. Recently, LAHD repaired storm drains and sewer lines, replaced poor quality beach sand with clean sand, removed the groin at the northern end of the beach, and installed a bird exclusion device, all as part of its commitment to make sure that Inner Cabrillo Beach continues to be an important regional recreational asset and, more importantly, to improve water quality. In 2004, the Los Angeles RWQCB adopted an Amendment to the Water Quality Control Plan to incorporate the Los Angeles Harbor Bacteria Total Maximum Daily Load (TMDL). The TMDL was developed to address impairments of water quality standards by coliform and beach closures at Inner Cabrillo Beach and the Main Ship Channel at the Port. A TMDL specifies the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and allocates the pollutant loadings to point and nonpoint sources.

Habitat Management and Endangered Species

California Least Tern Site Management. The federal- and state-listed endangered California least tern (a species of small sea bird) nests from April through August on Pier 400 in the Port adjacent to the Pier 400 container terminal. Through an interagency nesting site agreement, LAHD maintains, monitors, and protects the approximately 15-acre nesting site on Pier 400.

Interagency Biomitigation Team. As part of the development of mitigation for the Deep-Draft Navigation Improvements, including the Pier 400 Landfill, the Port Complex helped establish an interagency mitigation team to evaluate and provide solutions for impacts of landfill and terminal construction on marine resources in the Ports. The primary agencies involved include USACE, the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), and the California Department of Fish and Wildlife (CDFW). A number of mitigation agreements have been established.
through this coordination, and the team continues to meet as necessary to address
environmental issues associated with Port development and operations.

General Port Environmental Programs

Green Building Policy. In August 2007, LAHD adopted a Green Building Policy, which
outlines the environmental goals for newly constructed and existing buildings, dictates
the incorporation of solar power and technologies that are efficient with respect to the use
of energy and water, dedicates staffing for the advancement and refinement of sustainable
building practices, and maintains communication with other City of Los Angeles
departments for the benefit of the community. The policy incorporates sustainable
building design and construction guidelines based on the United States Green Building
Council – Leadership in Energy and Environmental Design Green Building Rating
System (POLA 2007).

Recycling. LAHD incorporates a variety of innovative environmental ideas into its
construction projects. For example, when building an on-dock rail facility, LAHD saved
nearly $1,000,000 and thousands of cubic yards of landfill space by recycling existing
asphalt pavement instead of purchasing new pavement. LAHD also maintains an annual
contract to crush and recycle broken concrete and asphalt. In addition, LAHD
successfully has used recycled plastic products, such as fender piles and protective
front-row piles, in many wharf construction projects.

1.7 Changes to the Draft EIS/EIR

This section of the Final EIS/EIR discusses general changes and modifications that have
been made to the Draft EIS/EIR. Actual changes to the text, organized by Draft EIS/EIR
chapters and sections, can be found in Chapter 3, Modifications to the Draft EIS/EIR, of
this Final EIS/EIR.

Changes noted in Chapter 3 are identified by text strikeout and underline. These changes
are referenced in Chapter 2, Responses to Draft EIS/EIR Comments, of this Final
EIS/EIR, where applicable. The project description is presented above and summarized
in the Executive Summary, incorporating the editorial changes noted in the Responses to
Comments and other minor corrections. Changes to the Draft EIS/EIR include:

- addition of a lease measure to Section 3.2, Air Quality and Meteorology, and a
  mitigation measure to Section 3.6, Greenhouse Gas Emissions;
- modifications to mitigation measures in Section 3.2, Air Quality and
  Meteorology, and Section 3.8, Groundwater and Soils;
- changes to the environmental justice finding related to construction-related noise
  impacts;
- minor editorial corrections to Section 3.8, Groundwater and Soils; Chapter 5,
  Environmental Justice; and Chapter 7, Socioeconomics; and
- minor addition of background information in Section 3.8, Groundwater and Soils
  and Chapter 7, Socioeconomics.
The changes and clarifications presented in Chapter 3 were reviewed to determine
whether or not they warranted recirculation of the Draft EIS/EIR prior to certification of
the EIS/EIR according to CEQA and NEPA guidelines and statutes. The changes would
not result in any new significant environmental impacts or a substantial increase in the
severity of an existing environmental effect. In response to public comments, changes
and clarifications have been made throughout the Draft EIS/EIR. There would be no new
or increased significant effects on the environment due to the proposed changes, and no
new alternatives have been identified that would reduce significant effects of the
proposed Project. Therefore, the Draft EIS/EIR does not need to be recirculated, and the
EIS/EIR can be certified without additional public review, consistent with PRC Section
21092.1 and State CEQA Guidelines Section 15088.5, and NEPA regulations in 40 CFR
1502 and 1503.
1.8 References


