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BERTHS 302-306 [APL] CONTAINER TERMINAL PROJECT

Draft EIS/EIR Reader's Guide

December 2011

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THE PORT OF LOS ANGELES

With assistance from:

CDM

US Army Corps of Engineers

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Release of the Draft Environmental Impact Statement (EIS) / Environmental Impact Report (EIR)

The Los Angeles Harbor Department (LAHD) and the U.S. Army Corps of Engineers (USACE) have released the Draft Environmental Impact Statement/ Draft Environmental Impact Report (Draft EIS/EIR) for the Berths 302 – 306 American President Lines (APL) Container Terminal Project ("proposed Project"). The purpose of this document is to inform the public of the proposed Project, alternatives considered, any potential environmental impacts, key community concerns, and the environmental review process. While this document summarizes the Draft EIS/EIR, is not an official part of the Draft EIS/EIR, which was prepared to comply with the National Environmental Protection Act (NEPA) and California Environmental Quality Act (CEQA) requirements.

Table of Contents

Background Information about General Terminal Operations

The proposed Project is part of the goods movement chain, which is a complex international system that moves goods from their points of production to consumers by different modes of transportation (ship, rail, and truck). As it relates to the Ports of Los Angeles and Long Beach ("Ports", also referred to as the San Pedro Bay Port Complex), the points of production generally are in foreign countries, while consumers are located in the United States.[1] The goods movement chain is a coordinated process that includes shippers, shipping lines, third-party logistics providers, stevedoring companies, port cargo terminal operators, labor, truckers, railroads, and distribution centers. Manufacturers, retailers, or third-party logistics firms often contract with shipping lines to move goods from origin to destination. Shipping lines own and lease container equipment, and typically enter into agreements with trucking companies and railroads for the transport of international cargo between the manufacturers and retailers and the marine terminals. The ability to move the same container between ships, trucks, and rail is called intermodal transport and is accomplished through the use of standardized containers that can be easily moved between modes. Figure 1 illustrates the flow of containers through the various stages of the goods movement chain. The majority of goods coming into the Ports are imported, arriving in shipping containers transported on container ships. Figure 2 shows the general layout of the APL Terminal and container terminal operations with the containers arriving by ship (at the berth) and leaving by truck and rail. For export cargo, this movement of the containers is reversed as containers are brought to the terminal by truck and rail to be placed on ships leaving the Port. The movement of cargo via containers in and out of the terminal occurs simultaneously throughout any given time.

***Key* Definitions**

Goods Movement Chain = A complex international system that moves goods from their points of production to consumers by different modes of transportation (ship, rail, and truck).

Intermodal Transport = The ability to move the same container between ships, trucks, and rail.

[1] Los Angeles is a major gateway for imports, with inbound shipments accounting for 86 percent of the value of the freight it handled in 2008.

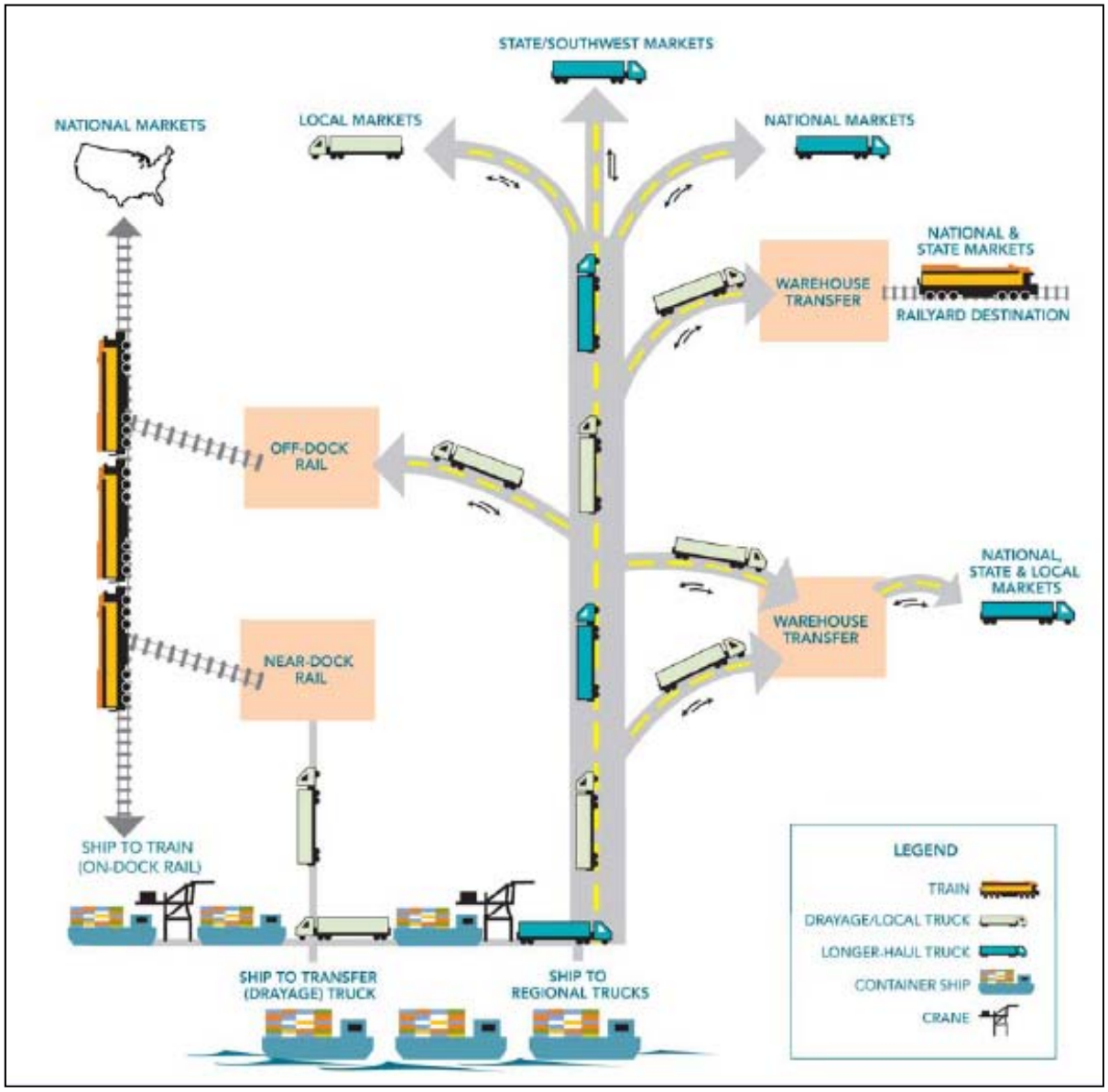
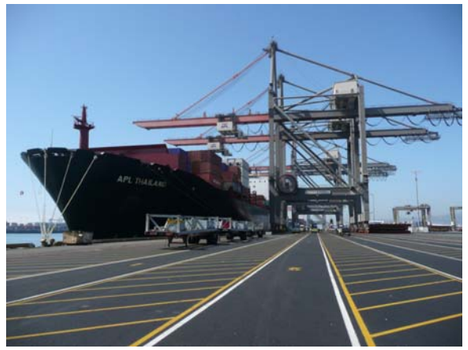
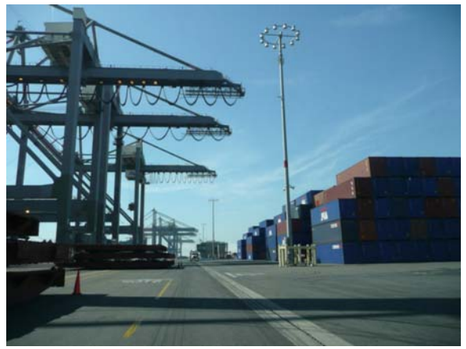
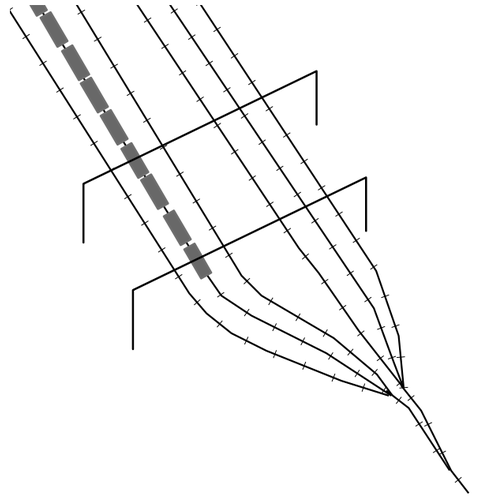


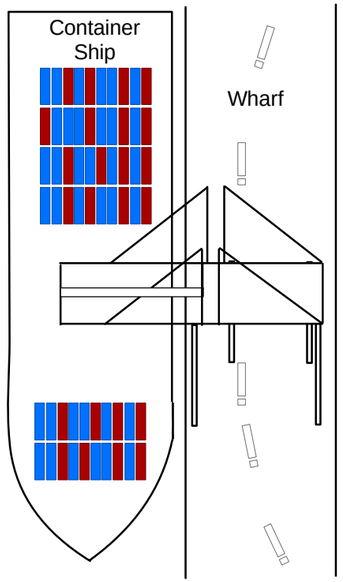
Figure 1: Goods Movement Chain: Transportation Distribution





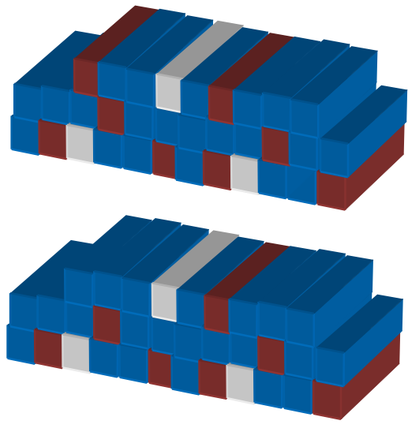
Containers loaded/unloaded to train cars at on-dock railyard

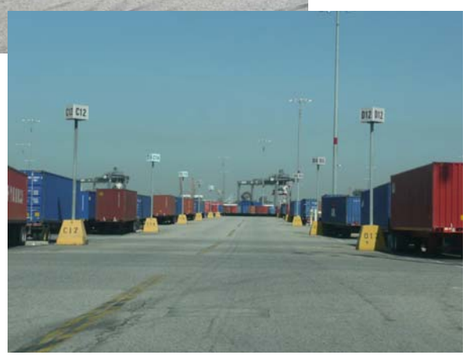


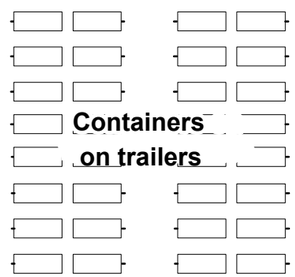


A-frame cranes transfer containers between ship and yard tractors for transport to backlands or on-dock railyard

Stacked containers stored in backlands







Containers on trailers

Containers leave the facilty via rail (regional) or by truck (local or delivery to off-dock railyard)

Port of Los Angeles
Berths 302 - 306 [APL]
Container Terminal Project
General Container Terminal Operations

CDM

Figure 2

Project Purpose and Objectives

The overall purpose of the proposed Project is to optimize and expand the cargo-handling capacity at the APL Terminal to provide a portion of the facilities needed to accommodate the long-term growth in the volume of containerized cargo through the Port and at the APL Terminal while implementing the Port's green growth strategy. This purpose would be addressed through expansion and improvement of the existing Berths 302-305 marine terminal from the current 291 acres to approximately 347 acres, including extension of the existing wharf by 1,250 feet (creating Berth 306), to accommodate an annual throughput of up to approximately 3.2 million twenty foot equivalent units (TEUs) by 2027.

***Key* Definitions**

Berth = Dock for ship: a place, usually alongside a quay or dock, where a boat ties up or anchors.

TEU = Twenty-foot Equivalent Unit = One 20-foot-long x 8-foot-wide x 8-foot-6-inch-high shipping container. Presently, most maritime containers are 40 feet long or two TEUs

Project objectives include:

- Optimize the use of existing land at Berths 302-305, behind the proposed Berth 306, and associated waterways in a manner that is consistent with the LAHD's public trust obligations;
- Improve the container terminal at Berths 302-306 to more efficiently work larger ships and to ensure the terminal's ability to accommodate increased numbers and sizes of container ships;
- Increase accommodations for container ship berthing, and provide sufficient backland area and associated improvements for optimized container terminal operations, at Berths 302-306;
- Incorporate modern backland design efficiencies into improvements to the existing vacant landfill area at Berth 306; and
- Improve the access into and out of the terminal and internal terminal circulation, at Berths 302-306 to reduce the time for gate turns and to increase terminal efficiency.

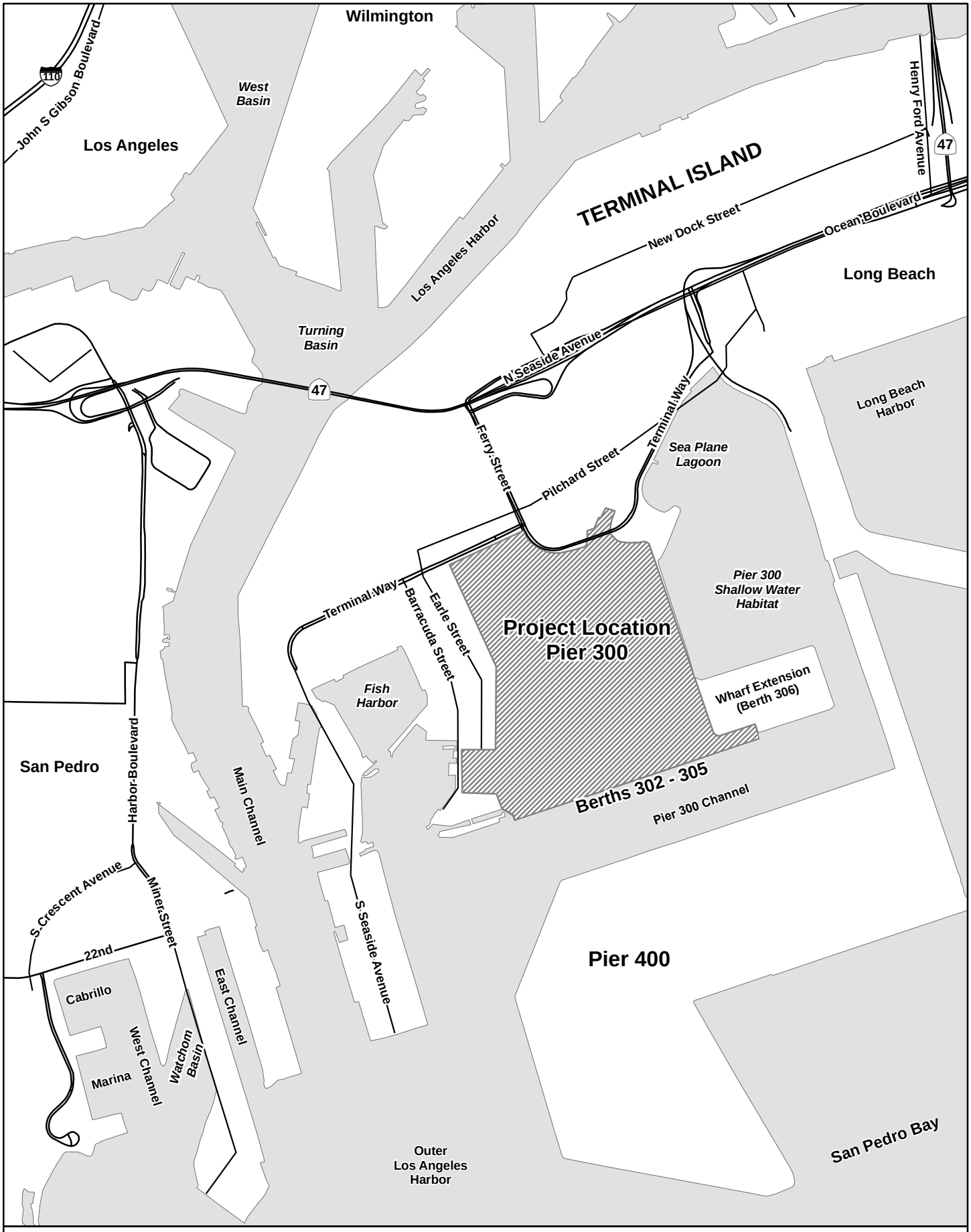
Looking southeast toward the existing APL Terminal (proposed Project site) from Friendship Park

Project Location

The proposed Project site is located within the Port of Los Angeles portion of the San Pedro Bay, which is approximately 20 miles south of downtown Los Angeles (Figure 3). The Port of Los Angeles is adjacent to the communities of San Pedro and Wilmington. Within the Port of Los Angeles, the Project site is on Terminal Island (a mostly man-made island in the heart of the Port. 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.

Existing Setting

The existing APL Terminal is located on Pier 300. It occupies approximately 291acres and includes: 4,000 feet of wharf with four labeled berths (Berths 302 through 305); an on-dock railyard that can accommodate up to 64 five-platform double-track railcars (equivalent to nearly three full trains); two dedicated lead rail tracks with flexible entrance/exit points off the main rail line within the Alameda Corridor; a transloading dock; a gate complex that includes an intermodal control tower; 15 inbound and 8 outbound lanes; automobile parking facilities; two marine buildings; 600 refrigerated container plugs; a washdown facility for refrigerated container units (also known as "reefers") and trucks; and maintenance and repair facilities consisting of a chassis shop (approximately 30,000 square feet) and a Power Shop (approximately 22,000 square feet). Existing equipment and facilities on the proposed Project site include: 12 A-frame 100 foot-gauge cranes along the south-facing wharves, along with mobile equipment used to handle containers.


Wilmington
West Basin
Los Angeles
John S Gibson Boulevard
110
TERMINAL ISLAND
Henry Ford Avenue
47
New Dock Street
Ocean Boulevard
Long Beach
Los Angeles Harbor
Turning Basin
N Seaside Avenue
47
Ferry Street
Pilchard Street
Terminal Way
Long Beach Harbor
Sea Plane Lagoon
Terminal Way
Barracuda Street
Earle Street
Pier 300 Shallow Water Habitat
Project Location
Pier 300
Fish Harbor
Wharf Extension (Berth 306)
San Pedro
Harbor Boulevard
Main Channel
Berths 302 - 305
Pier 300 Channel
S Crescent Avenue
Miner Street
22nd
S Seaside Avenue
Pier 400
Cabrillo
East Channel
West Channel
Marina
Watchom Basin
Outer Los Angeles Harbor
San Pedro Bay
N
CDM
Legend
Existing Terminal
1,000 0 1,000
Feet
Port of Los Angeles
Berths 302 - 306 [APL]
Container Terminal Project
Project Site and Vicinity
Figure 3

Current cargo handling equipment consists of approximately 36 forklifts, 7 side picks, 19 top handlers, 8 Rubber Tire Gantry (RTG) cranes, 10 Rail Mounted Gantry (RMG) cranes, and 195 yard tractors. Figure 4 shows key features of the existing container terminal.

RMG at the existing on-dock railyard

Proposed Project

The proposed Project would expand and redevelop the existing APL Terminal at Berths 302-305 (the expansion would extend to Berth 306) located on Pier 300 of Terminal Island. During the period of July 2008 to June 2009, the APL Terminal handled approximately 1,128,080 TEUs. At full capacity, expected to occur by 2027, the APL Terminal would support an annual throughput capacity of approximately 3,206,000 (or 3.2) TEUs. The proposed Project encompasses approximately 347 acres and includes improvements to the existing 291-acre APL Terminal and an expanded area of 56 acres. The following summarizes the improvements that would occur within each area. Please refer to Figure 5 for a visual representation of the major elements of the proposed Project.

Proposed improvements to the existing terminal would:

- Modify the Main Gate (convert existing outbound lanes to inbound lanes);
- Modify the terminal entrance lanes;
- Modify the Earle Street gate;
- Install up to 4 new cranes at Berths 302-305;
- Convert a portion of the existing dry container storage unit area to a storage area equipped with plug-in electric power for reefer unit storage;
- Demolish and re-construct the Roadability facility;
- Expand the Power Shop facilities by constructing and operating a separate two-story Power Shop Annex building (just north of the existing Power Shop), which would include tractor maintenance bays (first floor) and Marine Offices (second floor); and
- Install utility infrastructure at various areas in the backlands (including the removal and installation of new light poles, utilities for a new "Meet and Greet" booth on backlands behind Berth 301, etc).

***Key* Definitions**

Throughput = The number of containers that pass through a terminal over a given time.

Roadability Facility = A facility where loaded trucks are inspected to check their operational condition prior to leaving the terminal

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CDM

Legend

Existing Terminal

500 250 0 500

Feet

Port of Los Angeles
Berths 302 - 306 [APL]
Container Terminal Project
Project Site - Existing Conditions
Buildings
Figure 4

Legend

- New 41 acres
- New 4 acres
- New 7 acres
- New 2 acres
- New 2 acres
- Existing Terminal

N

CDM

500 250 0 500

Feet

Port of Los Angeles

Berths 302 - 306 [APL]

Container Terminal Project

Proposed Project

Figure 5

Proposed expansion-area project elements would:

- Construct approximately 1,250 linear feet (4 acres) of concrete wharf to create Berth 306;
- Install up to 8 new cranes on the new wharf of Berth 306;
- Install Alternative Maritime Power (AMP) along the new wharf at Berth 306;
- Dredging at Berth 306; the dredged material (approximately 20,000 cubic yards) would be beneficially reused (as fill), or disposed of at an approved confined disposal facility site. If these options are unavailable or impracticable, an existing ocean disposal site could be considered;
- Improve approximately 41 acres of already constructed fill as container terminal backland with infrastructure for traditional as well as potential future automated operations at Berth 306;
- Redevelop approximately 2 acres of the former LAXT conveyor right of way and approximately 7 acres of former LAXT backland behind Berth 301 into container terminal backland; and
- Develop approximately 2 acres of existing land northeast of the current main gate for a new out gate location.

***Key* Definitions**

AMP (Alternative Maritime Power) = A method of providing power to a ship from an external source.

Dredging = An operation to excavate material from the bottom of a shallow sea or freshwater area, disposing of the material at a different location.

In addition, within the existing backlands behind Berths 302-305, the proposed Project includes the installation of a new Los Angeles Department of Water and Power (LADWP) industrial station (adjacent to the existing industrial station and new AMP substation, which is located near the existing Roadability Canopy/Genset Building), as well as various substations to support either traditional or electric-powered automated operations on the 41 acres of backlands adjacent to proposed Berth 306. If the new Berth 306 backlands are used to support an automated operation in the future, an area approximately 12 acres in size within the existing backland area adjacent to the new backlands would need to be converted to a Landside Transfer Area (a delineated area where drivers and trucks wait for containers held within the Berth 306 backlands).

41-acre Backland Development and Operation

Development of the backlands on the 41-acres of undeveloped fill adjacent to the existing terminal and proposed Berth 306 would include grading, paving and striping, underground electrical lines; water lines; light poles; conduits to support electrical, data and phone connections; sewers; gas lines; and drainage infrastructure. The infrastructure would be adequate to support either traditional or automated (electric-powered) operations.

Automated Backlands

The existing APL Terminal operates using "traditional" methods for container terminal operations. Under the traditional operations, 1 to 10 cranes operating simultaneously unload or load one ship. Once containers have been off-loaded from the ship or received through the gates on trucks and trains, the containers are stored and moved around the backlands area of the terminal using cargo handling equipment. All of the unloading/loading and handling equipment used in the traditional backland operations is performed and operated by workers. A majority of the equipment used in traditional operations is diesel-powered.

***Key* Definitions**

Traditional operations = A manual operated handling system.

Automated operations = An automated container handling system.

The Ports of Los Angeles and Long Beach have developed a roadmap for moving forward with the identification, evaluation, and integration of zero emission technologies for goods movement. It is foreseeable that a technology change could result in replacement of some of the traditional backland operations at the APL Terminal through the use of an automated container handling system on the proposed 41-acre backland area adjacent to the proposed Berth 306. If installed, such a system would involve the use of semi-automatic dual hoist electric shore side gantry cranes, Automated Guided Vehicles (AGVs), electric ASCs, and semi-automated electric Landside Transfer Cranes (LTCs). Figures 6 and 7 show a preliminary conceptual design associated with the potential automated container operations.

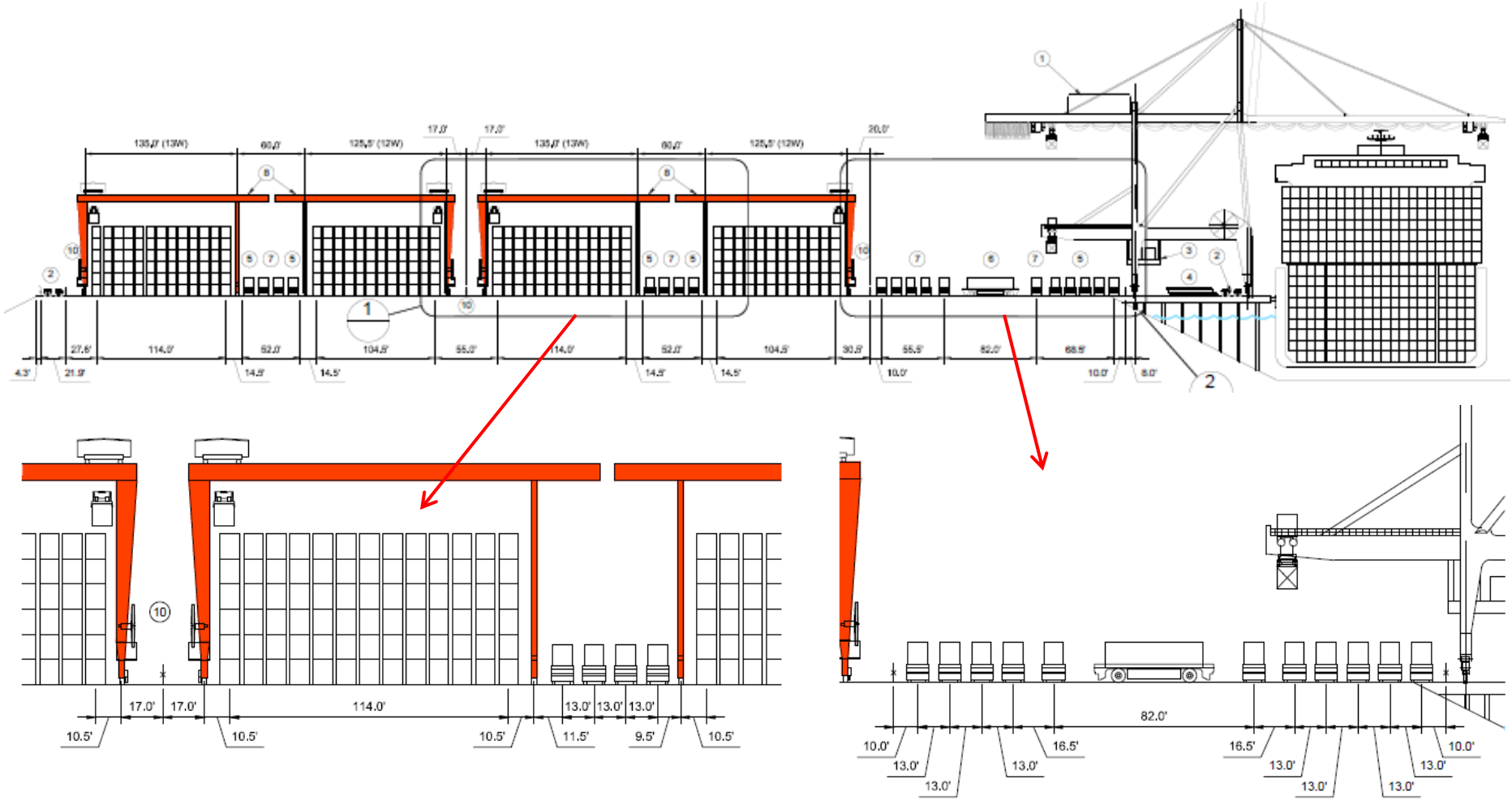
Once the vessel arrives at the berth, the cranes would begin unloading containers from the vessel. The crane would lift the container from the vessel to a platform on the crane and then lift the container from the platform to an AGV that is positioned directly to the rear of the crane. The AGV would receive wireless instructions and proceed through the use of sensors below the ground surface to a pre-assigned location in the backlands area. Once the AGV arrives at the correct location, an ASC would lift the container from the AGV and place it in the appropriate location.

Import and export containers will be processed in the Landside Transfer Area, which will be located adjacent to the backlands area. To move a container from the backlands to a waiting truck, an AGV is guided to the location of the container and an ASC lifts the container onto the AGV. The AGV then proceeds to the stall where the truck is parked on the Landside Transfer Area and an LTC lifts the container from the AGV onto the truck chassis. The process for handling and loading export containers would be the same but in the reverse direction. With the exception of the operator of the A-frame/shore side gantry crane, operation of the automated backlands would be unmanned and fully automated. The automated system would be operated from a remote facility (such as the remodeled/expanded Power Shop). With the exception of the diesel/electric AGVs, all or part of the equipment used would be electric.

While infrastructure to support electric and automated equipment would be installed as part of the initial proposed Project improvements by 2013, the timing of the installation, integration, and operation of the automated equipment on the 41-acre backlands area would depend largely on market demand and cost. If automated operations occur in the 41-acre backland area adjacent to the proposed Berth 306, the TEU volumes for the APL Terminal in 2027 would be the same as they would be under traditional container terminal operations. There are a number of factors which constrain the overall capacity of the 41-acre backland as well as the operation of the 41-acres with the existing APL Terminal. These constraints including limits on berth capacity, container yard capacity and landside transfer capacity. Therefore, automation of the backland would not increase the overall cargo throughput of the terminal.

If EMS determines that automated operations are feasible and cost effective for the Berth 306 backlands, additional infrastructure specific to the automated operation would need to be installed. Future installation of the automated equipment would be less complex than installation of the supporting infrastructure that has been included in the initial construction plans for the backland area. This additional work would include some asphalt grinding to flatten the finished grade and to expose the concrete beams, installation of steel rails, and installation of reefer racks (foundations with plug-in electric power) along the edge of the 41-acre area (these racks would allow refrigerated container units to be stored). Improvements to delineate and support operation of the Landside Transfer Area would also be installed adjacent to the Berth 306 backlands, including some excavation and installation of concrete rail beams to support the LTCs, pavement striping, waiting booths for drivers, and concrete curbing.

Although no date is certain, for this environmental analysis, the construction effects of the installation of additional infrastructure and equipment necessary for automated operations on the 41-acre are assumed to occur around 2020. However, it is unknown whether installation and use of such equipment would be cost-effective in 2020 or at any other time.



Storage yard cross section

Waterside transfer and transport area

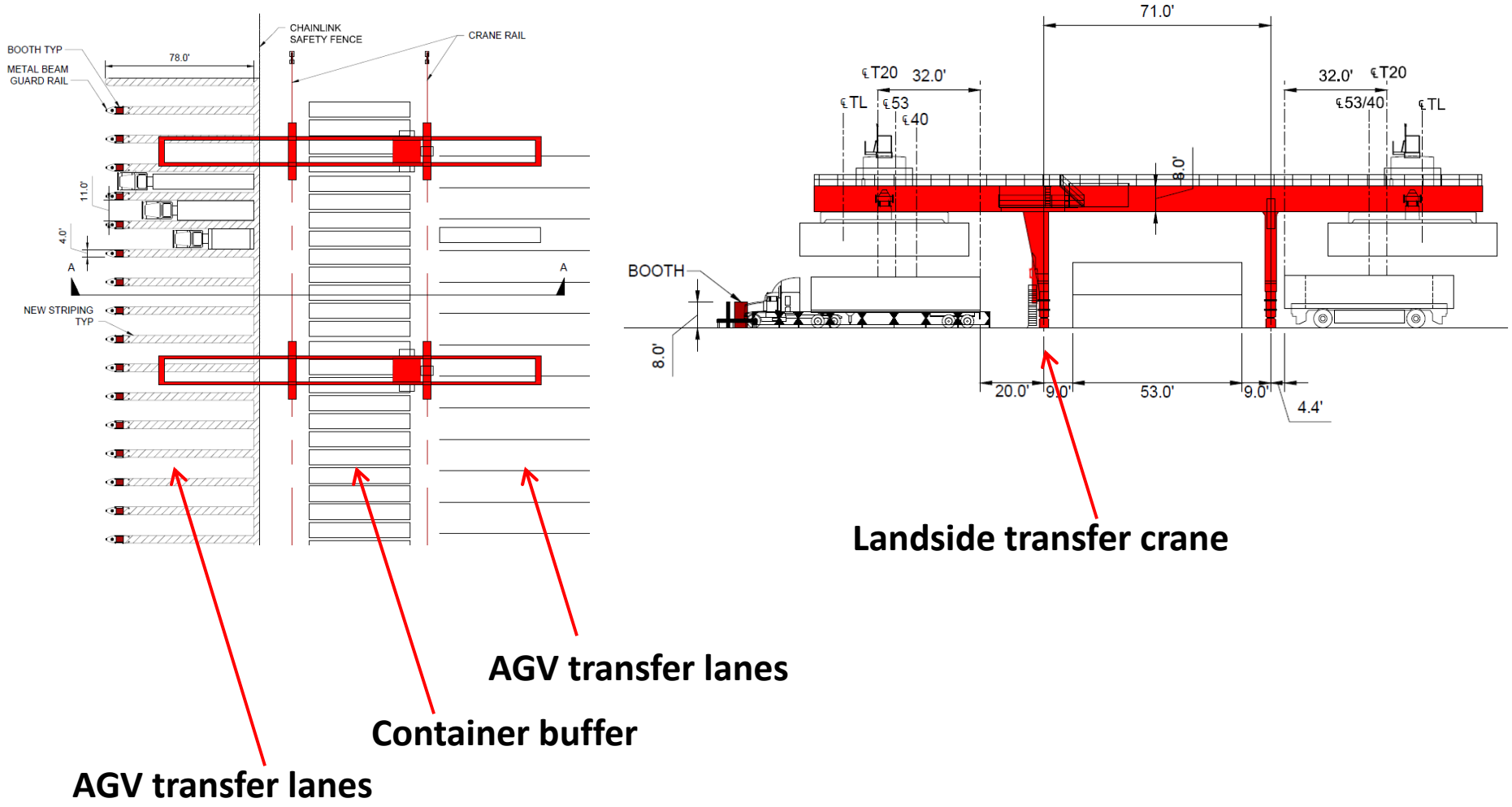
Source: APL/Moffat & Nickel, 2011

Note: These elements and their size and arragement are for disccusion purposes only

CDM

Automated 41-Acre Backland

Port of Los Angeles
Berths 302 - 306 [APL]
Container Terminal Project
Proposed Layout - Sections
Figure 6



Source: APL/Moffat & Nicket, 2011

Note: These elements and their size and arragement are for disccusion purposes only

The potential environmental impacts associated with the operations of the Berth 306 backlands as a traditional container terminal are quantified under each environmental resource area. This is the most conservative approach for estimating the environmental impacts associated with the proposed Project operations. Where impacts associated with automated operations could differ from impacts associated with traditional operations, the impacts of automated operations at the backland area adjacent to Berth 306 also are addressed at full build-out in 2027, based on the information available from the conceptual designs.

What are NEPA and CEQA?

NEPA was enacted by Congress in 1969 and requires federal agency decision-makers to document and consider the environmental consequences of their actions or decisions on the quality of the human environment. NEPA applies only to activities proposed by the federal government, or where a local project, whether public or private, involves federal funding, loan guarantees or approval. NEPA requires preparation of an EIS only for proposals for legislation and other major federal actions significantly affecting the quality of the human environment. CEQA was enacted by the state legislature in 1970 and was patterned after NEPA. CEQA requires public agency decision makers to document and consider the environmental implications of their actions. CEQA applies to all government agencies at all levels in California, including local agencies, regional agencies, and state agencies, boards and commissions.

***Key* Definitions**

Lead Agency = The Public Agency that has the primary responsibility for carrying out or approving a project that may have a significant effect on the environment.

The USACE is the federal lead agency responsible for preparation of the EIS for this Project. The LAHD is the state lead agency responsible for preparation of the EIR for this Project and is the project applicant. Both agencies have determined that there is the potential for significant environmental impacts and; therefore, a joint EIS/EIR has been prepared to avoid duplication of effort. Several other agencies have special roles with respect to the proposed Project and will use this EIS/EIR as the basis for their decisions to issue any approvals and/or permits that might be required. This environmental review process includes the preparation of the following documents (*More details on the EIS/EIR process are provided in Figure 8)*:

- An **Initial Study,** which is a preliminary analysis prepared by the CEQA Lead Agency to determine whether an EIR or Negative Declaration must be prepared and, if necessary, identify the significant environmental effects to be analyzed in an EIR. The NEPA Lead Agency prepares an **Environmental Assessment (EA)** that provides sufficient evidence and analysis to determine whether an EIS is required.

- A **Notice of Intent/Notice of Preparation/ (NOI/NOP)**, which is a brief notice sent to interested parties requesting input on establishing the scope (environmental issues addressed) of an environmental document. It is the first step in the EIS/EIR process.

- A **Draft EIR**, which fully analyzes the proposed Project, project alternatives, and environmental impacts. The **Draft EIS** analysis is limited to the scope of the federal project (i.e. the parts of the project that could not be built without a federal permit). Upon completion, the Draft EIS/EIR is made available for public review.

- A **Final EIS/EIR** is prepared after comments on the draft are received and reviewed. The Final EIS/EIR must contain the lead agency's response to all comments reviewed and must discuss any opposing views on the issues raised. The USACE prepares a **Record of Decision (ROD)** to support approval for federal permits for the project.

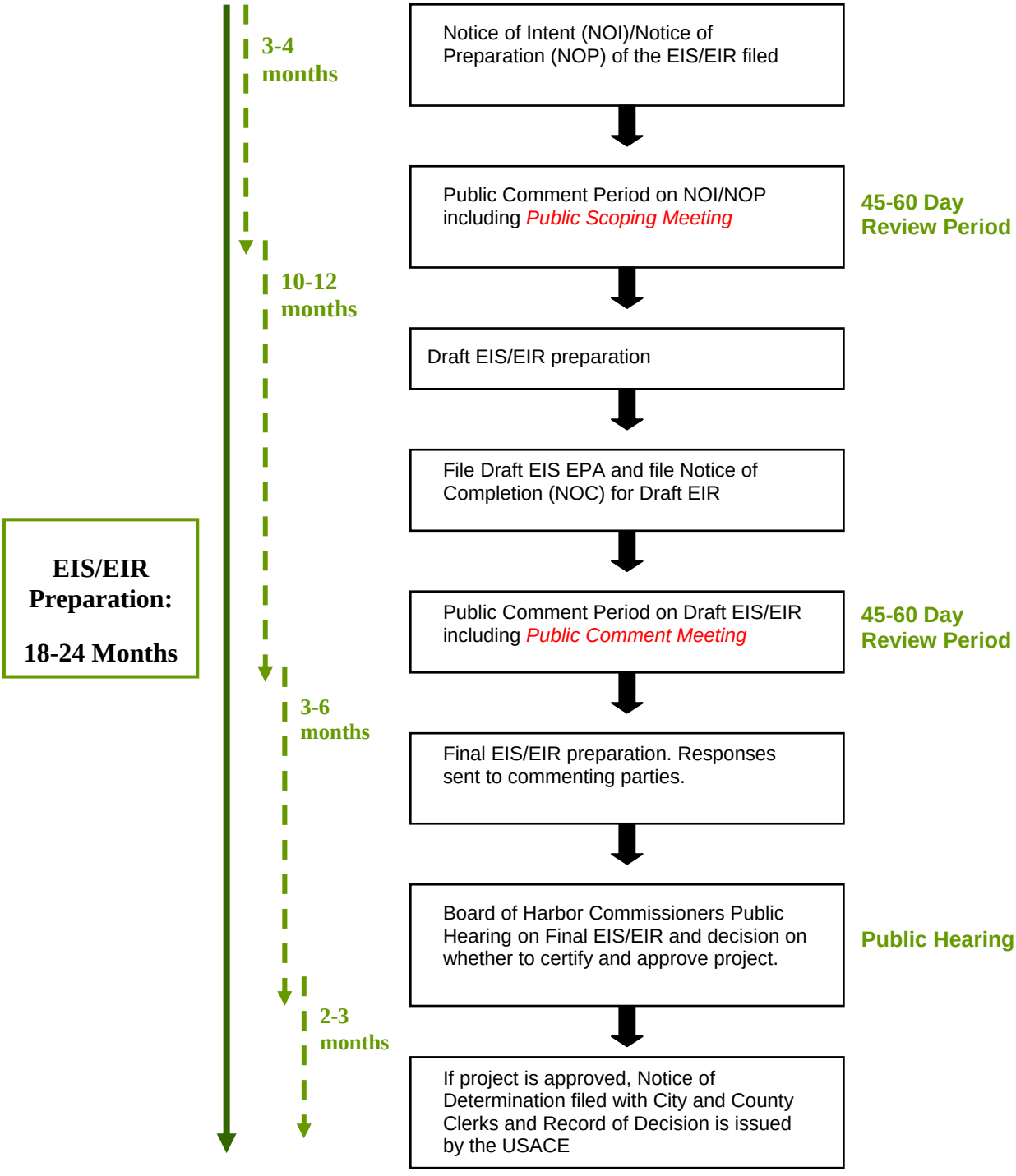


Figure 8: EIS/EIR Timeline

During the Draft EIS/EIR, the Port will gather comments from the public and other agencies about the analysis and content of environmental impacts as a result of the construction and operations of the proposed Project.

The Draft EIS/EIR will undergo a 60-day comment period from December 16, 2011 through February 17, 2012. During this time, the LAHD/USACE will accept written comments and will host a public meeting on January 19, 2012 to present its findings and provide opportunity for public comment. The public meeting will be held at 6:00 p.m. in the Board Room of the Harbor Administration Building, 425 S. Palos Verdes Street, San Pedro, CA 90731. All comments will be responded to in the Final EIS/EIR.

The public may request a free electronic copy or hard copy version (for a fee) of the Draft EIS/EIR by calling (310) 732-3675.

A copy of the Draft EIS/EIR may also be downloaded at www.portoflosangeles.org or hard copies may be viewed at the following locations:

- L.A. Public Library, Central Branch, 630 West 5th Street, Los Angeles California;
- L.A. Public Library, San Pedro Branch, 921 South Gaffey Street, San Pedro, California;
- L.A. Public Library, Wilmington Branch, 1300 North Avalon, Wilmington, California; or
- LAHD, 425 South Palos Verdes Street, San Pedro, California.

How are Impacts Determined?

The purpose of the environmental review process is to:

- Inform government officials and the public of the environmental impacts of a proposed project
- Identify impacts of a proposed project on the environment
- Review a range of reasonable alternatives that would avoid or lessen any significant environmental impacts
- Indicate ways to avoid or mitigate, if possible, significant impacts

Key Definitions

Statement of Overriding Considerations = A statement that specifies specific reasons why the Lead Agency found that the project's benefits outweigh its unavoidable adverse impacts environmental effects.

In instances where significant impacts cannot be avoided or mitigated to less than significant levels, the project could still be approved if there are economic, legal, social, technological, or other benefits that outweigh unavoidable significant environmental effects (referred to as overriding considerations).

In EIS/EIRs, environmental impacts are determined in a step-wise process:

1. Analyze the environmental conditions when the review began (called baseline conditions). Normally, baseline conditions are the physical environmental conditions in the vicinity of a project that exist at the time of the NOI/NOP is provided to the public. The NOI/NOP for the proposed Project was released in July 10, 2009.

2. Analyze the environmental conditions over the life of a proposed Project. The proposed Project operates at full build-out and optimal capacity by 2027.

3. Compare baseline and Project conditions. The difference between baseline and Project conditions (the delta) is compared to thresholds. The Port uses the City of Los Angeles CEQA Thresholds Guide (*L.A. CEQA Thresholds Guide*).

4. If the difference between the Project and baseline conditions exceeds the threshold, the impact is considered **significant**. If the difference does not exceed the threshold, the impact is considered **less than significant**.

If the analysis finds that there are significant impacts, feasible mitigation measures, if available, are applied to reduce the impacts. If mitigation is not able to reduce impacts below the threshold, the impacts are defined as **significant and unavoidable**. The following is a summary of the environmental impacts that would be created by the construction and operation of the proposed Project.

Summary of Proposed Project Impacts

Unavoidable Significant Impacts

- Air Quality, Meteorology and Greenhouse Gases
- Biological Resources

Less-than-Significant Impacts after Mitigation

- Ground Transportation
- Noise

Less-than-Significant Impacts

- Aesthetics and Visual Resources
- Cultural Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Marine Transportation
- Recreation
- Public Services and Utilities
- Water Quality, Sediments and Oceanography

Project Mitigation Measures

CEQA requires public agencies to adopt a reporting or monitoring program for the changes to the project that have been adopted to mitigate or avoid significant effects on the environment (Public Resources Code Section 21081.6). The mitigation monitoring and reporting program (MMRP) must be adopted by the public agency at the time findings are made regarding the project. These mitigation measures (MM) described are supplemental to those standard conditions of approval (SC) and lease measures (LM) that will be included in the MMRP and are as follows:

Air Quality, Meteorology, and Greenhouse Gases

- **MM AQ-1**: Harbor Craft Used During Construction
- **MM AQ-2**: Cargo Ships
- **MM AQ-3**: Fleet Modernization for On-Road Trucks
- **MM AQ-4:** Fleet Modernization for Construction Equipment
- **MM AQ-5**: Best Management Practices
- **MM AQ-6**: Additional Fugitive Dust Controls
- **MM AQ-7**: General Mitigation Measure
- **MM AQ-8**: Special Precautions Near Sensitive Sites
- **MM AQ-9:** Alternative Maritime Power (AMP)
- **MM AQ-10**: Vessel Speed Reduction Program
- **MM AQ-11**: Cleaner Ocean-going Vessels (OGV) Engines
- **MM AQ-12**: OGV Engine Emissions Reduction Technology Improvements
- **MM AQ-13**: Yard Tractors at Berths 302-306 Terminal
- **MM AQ-14**: Yard Equipment at Berths 302-306 Railyard
- **MM AQ-15**: Yard Equipment at Berths 302-306 Terminal
- **MM AQ-16**: Truck Idling Reduction Measure
- **MM AQ-17**: Compact Fluorescent Light Bulbs
- **MM AQ-18**: Energy Audit
- **MM AQ-19**: Recycling
- **MM AQ-20**: Tree Planting
- **LM AQ-1**: Periodic Review of New Technology and Regulations
- **LM AQ- 2**: Substitution of New Technology

Biology

- **MM BIO-1:** Conduct nesting bird surveys.
- **SC BIO-1:** Avoid marine mammals.

Cultural Resources

- **SC CR-1:** Stop work in area if prehistoric and/or archaeological resources are encountered.

Geology

- **LM GEO-1:** Emergency Response Planning Lease Requirement

Ground Transportation

- **MM TRANS-1**: Navy Way and Reeves Avenue

Groundwater and Soils

- **LM GW-1:** Site Remediation
- **LM GW-2:** Contamination Contingency Plan

Noise

- **MM NOI-1**: Noise Reduction during Pile Driving.
- **MM NOI-2**: Erect Temporary Noise Attenuation Barriers Adjacent to Pile Driving Equipment, Where Necessary and Feasible

Public Service and Utilities

- **SC PS-1**: Recycling of Construction Material
- **SC PS-2**: Use of Materials with Recycled Content

Alternatives Considered

This Draft EIS/EIR must evaluate a reasonable range of alternatives to the proposed Project. A total of 23 alternatives were considered during preparation of this Draft EIS/EIR, which included alternative terminal configurations, alternative uses, and alternative locations for the terminal and various Project components. Six of these alternatives (in addition to the proposed Project) with the potential to meet most of the proposed Project objectives have been carried forward for detailed analysis (*See Chapter 3 of the Draft EIS/EIR for more information*)

The following section includes description of the six alternatives carried forward for further detail analysis. For more analysis on these alternatives and the alternatives that were considered but eliminated from further evaluation can be found in *Chapter 2, Project Description, of the Draft EIS/EIR.*

Alternatives Analyzed in this Draft EIS/EIR

The six alternatives to the proposed Project that are considered in this Draft EIS/EIR are:

1) Alternative 1 – No Project
2) Alternative 2 – No Federal Action
3) Alternative 3 – Reduced Project: Four New Cranes
4) Alternative 4 – Reduced Project: No New Wharf
5) Alternative 5 – Reduced Project: No Space Assignment
6) Alternative 6 – Proposed Project with Expanded On-Dock Railyard

Each alternative includes an illustration that details the particular elements of the alternative that are evaluated in the Draft EIS/EIR and Table 1 provides a summary of the differences in the construction and operation of the proposed Project and each of those alternatives at build-out (2027). *Chapter 2 of the Draft EIS/EIR contains a more detailed discussion of the Project alternatives.*

Table 1: Summary of Proposed Project and Alternatives at Full Build-out (2027)

	Terminal Acres	Annual Ship Calls	Annual TEUs (in millions)	Cranes	Total Dredging in Waters of the U.S.	New Wharves	Other*
Proposed Project	347	390	3,206,000	12 new cranes 12 existing cranes 24 total	20,000 cubic yards (cy) (along Berth 306)	Berth 306 (1,250 linear feet, or 4 acres)	▪ Reefer area & Berth 306 AMP ▪ +41 acres ▪ Upland Improvements
CEQA Baseline	291	247	1,128,080	12 existing cranes	No dredging	No new wharf	
Alternative 1 – No Project	291	286	2,153,000	12 existing cranes	No dredging	No new wharf	
Alternative 2 – No Federal Action **NEPA Baseline**	291	286	2,153,000	12 existing e cranes	No dredging	No new wharf	▪ Reefer area
Alternative 3 – Reduced Project: Four New Cranes	291	338	2,583,000	4 new cranes 12 existing cranes 16 total	No dredging	No new wharf	▪ Reefer area
Alternative 4 – Reduced Project: No New Wharf	302	338	2,783,000	6 new cranes 12 existing cranes 18 total	No dredging	No new wharf	▪ Reefer area ▪ +41 acres ▪ - 30 acres ▪ Upland Improvements except for Main Gate modifications and 9 acres behind Berth 301
Alternative 5 – Reduced Project: No Space Assignment	317	390	3,206,000	12 new cranes 12 existing cranes 24 total	20,000 cy (along Berth 306)	Berth 306 (1,250 linear feet, or 4 acres)	▪ Reefer area & Berth 306 AMP ▪ +41 acres ▪ - 30 acres ▪ Upland Improvements
Alternative 6 – Proposed Project with Expanded On-Dock Railyard	347	390	3,206,000	12 new cranes 12 existing cranes 24 total	20,000 cy (along Berth 306)	Berth 306 (1,250 linear feet, or 4 acres)	▪ Reefer area & Berth 306 AMP ▪ +41 acres ▪ Upland Improvements ▪ On-dock rail (expanded)

Alternative 1 – No Project

Under the No Project Alternative, the existing APL Terminal would continue to operate as an approximately 291-acre container terminal. Based on the throughput projections, Alternative 1 would handle approximately 2.15 million TEUs by 2027, which would result in 286 annual ship calls at Berths 302-305. In addition, this alternative would result in up to 7,273 peak daily one-way truck trips (1,922,497 annual), and up to 2,336 annual one-way rail trip movements. Under Alternative 1, cargo ships that currently berth and load/unload at the Berths 302-305 terminal would continue to do so.

Under Alternative 1, no further Port action or federal action would occur. The Port would not construct additional backlands, wharves, or terminal improvements. No new cranes would be added, no gate or backland improvements would occur, and no new infrastructure would be provided. This alternative would not include any dredging, new wharf construction, or new cranes. The No Project Alternative would not include development of any additional backlands because the existing terminal is berth-constrained and additional backlands would not improve its efficiency.

The No Project Alternative would not preclude future improvements to the APL Terminal; however, any change in future use with the potential to significantly impact the environment or improvement would need to be analyzed in a separate environmental document.

When compared against the CEQA baseline (see Table 1), the No Project Alternative would result in fewer environmental impacts than the proposed Project at the final out-year because its operational capacity and level of capital development would be lower. However, Alternative 1 would result in one significant unavoidable ground transportation impact at the intersection of Navy Way and Reeves Avenue that would not occur under the proposed Project. Although it would generate less traffic than the proposed Project, Alternative 1 would have a significant and unavoidable impact at the intersection because mitigation cannot be applied as there would be no discretionary action subject to CEQA.

The No Project Alternative is not the same as the CEQA Baseline. The existing terminal is not operating at its optimal capacity, meaning it could accommodate certain levels of increasing throughput demand, resulting in higher impacts compared to the CEQA Baseline period of July 2008 through June 2009.

When compared against the NEPA baseline, the No Project Alternative similarly would result in fewer environmental impacts than those experienced under the proposed Project. This result occurs because the NEPA baseline would assume a small amount of construction activity on the existing terminal would occur. As a note, the No Project Alternative is not evaluated under NEPA because NEPA requires an evaluation of the No Federal Action alternative.

Any future legally enacted Port-wide CAAP measures, such as a tariff change or emissions impact fee, would be applied to this alternative, although generally applicable tariff changes that conflict with the terms of an individual operating lease would not apply. Those CAAP measures that would be implemented through a lease modification or mitigation measure also would not apply.

Summary of Alternative 1 Impacts (NEPA not applicable)

Unavoidable Significant Impacts

- Air Quality, Meteorology and Greenhouse Gases
- Biological Resources
- Ground Transportation

Less-than-Significant Impacts after Mitigation

Not applicable

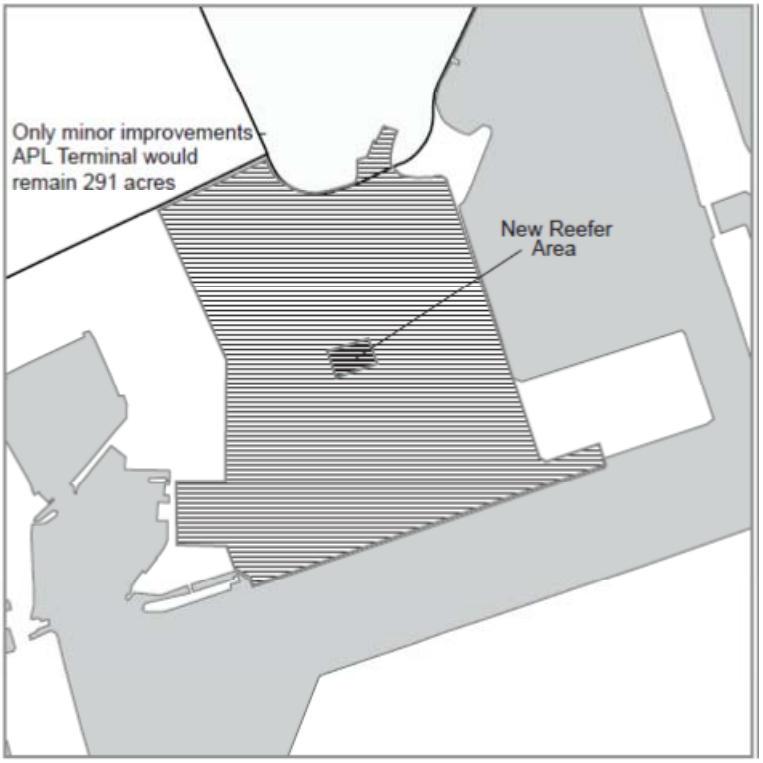
Less-than-Significant Impacts

- Aesthetics and Visual Resources
- Cultural Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Marine Transportation
- Noise
- Recreation
- Public Services and Utilities
- Water Quality, Sediments, and Oceanography

Alternative 2 – No Federal Action

This alternative includes only the activities and impacts likely to occur absent further USACE federal approval but could include improvements that require a local action. For purposes here, this alternative includes only the following Project elements, which would not affect the throughput capacity:

- The conversion of a portion of the dry container storage unit area to storage for an additional 200- unit reefer area and associated electrical infrastructure.
- Installation of utility infrastructure at various areas in the backlands (*e.g.*, relocation of light pole and electrical line extensions to accommodate the converted reefer areas).



The site would continue to operate as an approximately 291-acre container terminal where containers are loaded on and unloaded from vessels, are temporarily stored on backlands, and where containers are transferred to and from trucks and rail cars. Based on the throughput projections the No Federal Action Alternative would handle up to approximately 2.15 million TEUs by 2027, which would result in 286 annual ship

calls at Berths 302-305. In addition, this alternative would result in up to 7,273 peak daily truck trips (1,922,497 annual), and up to 2,336 annual one-way rail trip movements. Cargo ships that currently berth and load/unload at the Berths 302-305 terminal would continue to do so.

The No Federal Action Alternative would result in fewer environmental impacts than the proposed Project at the final out-year because its operational capacity and level of capital development would be lower. The reduced environmental impacts relative to the proposed Project would include fewer aesthetic impacts (no new cranes), less air quality impacts (no construction of a new berth and less operational emissions), less impact to biological or water resources (no wharf construction or dredging and fewer vessel calls), less impacts from ground traffic (lower throughput) and lower noise impacts (related to reduced truck trips and reduced construction).

The NEPA baseline and the No Federal Action Alternative are equivalent in this case, and represent project site conditions without federal action. Therefore, the impacts under the No Federal Action Alternative would be the same as the NEPA baseline scenario in every case, and this Alternative would result in no new impacts under NEPA.

Any future legally enacted Port-wide CAAP measure, such as a tariff change or emissions impact fee, would be applied to this alternative, although generally applicable tariff changes that conflict with the terms of an individual operating lease would not apply. Those CAAP measures that would be implemented through a lease modification or mitigation measure also would not apply.

Summary of Alternative 2 Impacts (No impacts under NEPA)

Unavoidable Significant Impacts

- Air Quality, Meteorology and Greenhouse Gases
- Biological Resources

Less-than-Significant Impacts after Mitigation

- Ground Transportation

Less-than-Significant Impacts

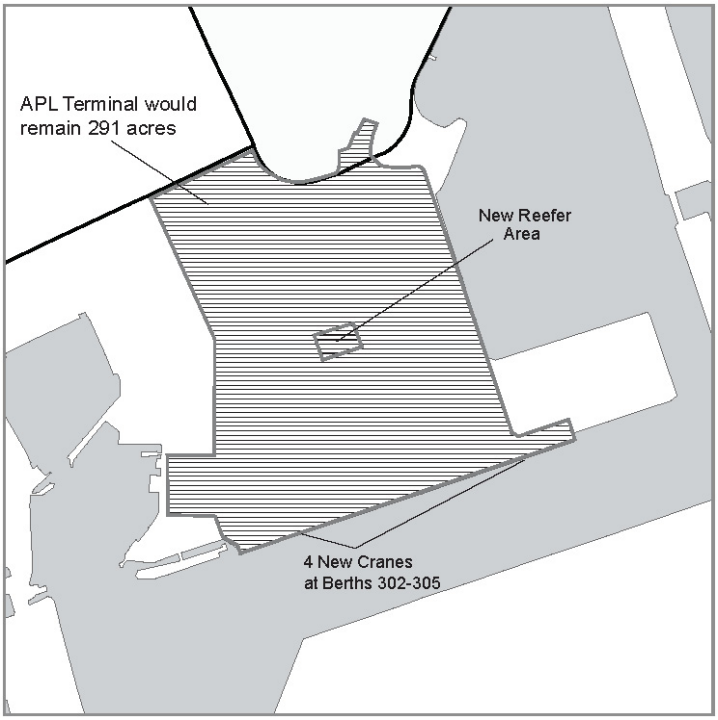
- Aesthetics and Visual Resources
- Cultural Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Marine Transportation
- Noise
- Recreation
- Public Services and Utilities
- Water Quality, Sediments, and Oceanography

Alternative 3 – Reduced Project: Four New Cranes

Under Alternative 3, four new cranes would be added to the existing wharf along Berths 302-305 and the following terminal improvements would be made:

- The conversion of a portion of the dry container storage unit area to storage for an additional 200-unit reefer area and associated electrical infrastructure.
- Installation of utility infrastructure at various areas in the backlands (e.g., relocation of light poles and electrical line extensions to accommodate the converted reefer areas).

Under Alternative 3, the total terminal size would remain at approximately 291 acres, which would be less than the proposed Project. Aside from the above improvements, this alternative would not include the addition or improvement of backland facilities, the construction of a new wharf, or the relocation and improvement of various gates and entrance lanes.



Based on the throughput projections under Alternative 3 would be less than the proposed Project, with an expected throughput of approximately 2.58 million TEUs by 2027. This would translate into 338 annual ship calls at Berths 302-305. In addition, this alternative would result in up to 8,725 peak daily truck trips (2,306,460 annual), and up to 2,544 annual one-way rail trip movements. Configuration of all other landside terminal components would be identical to the existing terminal.

When compared against the CEQA baseline, Alternative 3 would result in fewer environmental impacts than the proposed Project because this alternative's operational capacity would be lower and its level of capital development would be less. The reduced environmental impacts would include fewer aesthetic impacts (16 cranes compared to 24 for the proposed Project), fewer air quality impacts (less operational emissions), fewer biological or water resource impacts (no wharf construction and fewer vessel calls), fewer ground traffic impacts (fewer truck trips), and fewer noise impacts (related to fewer truck trips and no pile driving).

Relative to the NEPA baseline, Alternative 3 would result in fewer environmental impacts than those projected for the proposed Project. The decreased environmental impacts would result from reduced construction activities, this alternative envisions crane installations only, and reduced operational activity associated with the lower TEU throughput and corresponding direct ship, truck, and rail emissions.

Alternative 3 assumes implementation of existing and future legally required measures, such as the installation of AMP and associated infrastructure in compliance with CARB requirements, CAAP measures under the terms of the modified lease that would accompany this alternative, along with any mitigation measure legally imposed under CEQA and NEPA.

Summary of Alternative 3 Impacts

Unavoidable Significant Impacts

- Air Quality, Meteorology and Greenhouse Gases
- Biological Resources

Less-than-Significant Impacts after Mitigation

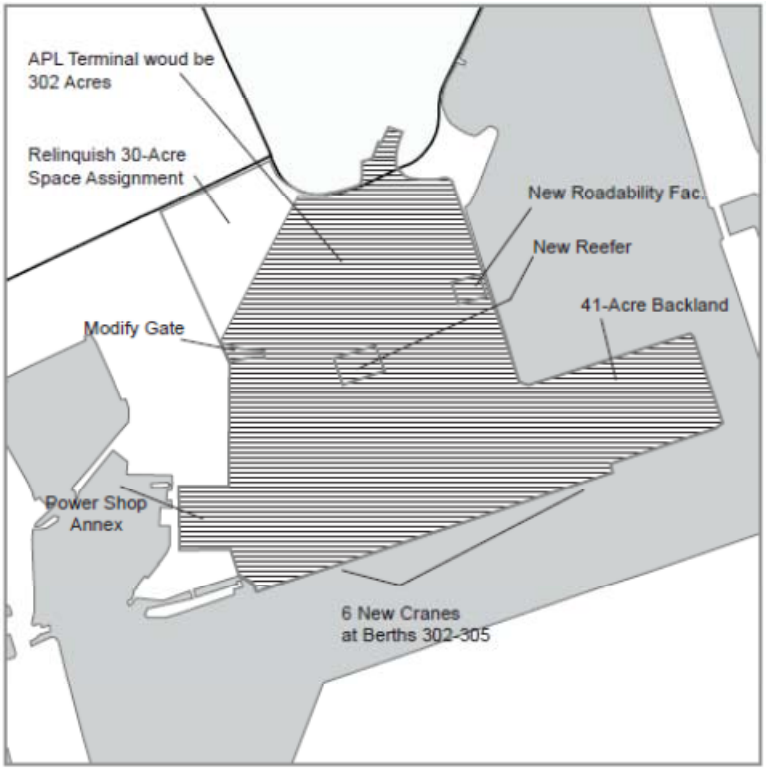
- Ground Transportation

Less-than-Significant Impacts

- Aesthetics and Visual Resources
- Cultural Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Marine Transportation
- Noise
- Recreation
- Public Services and Utilities
- Water Quality, Sediments, and Oceanography

Alternative 4 – Reduced Project: No New Wharf

Under Alternative 4, the total acreage of backlands under this alternative would be 302 acres, which is less than the proposed Project. Based on the throughput projections, the TEU throughput would be less than the proposed Project, with an expected throughput of approximately 2.78 million TEUs by 2027. This would translate into 338 annual ship calls at Berths 302-305. In addition, Alternative 4 would result in up to 9,401 peak daily truck trips (2,485,050 annual), and up to 2,563 annual one-way rail trip movements.



Under this alternative, six new cranes would be added to the existing terminal and the 41-acre fill area adjacent to the APL Terminal would be developed as container yard backlands. However, the 30 acres of backlands currently under a space assignment agreement would be relinquished. The nine acres of land behind Berth 301 or the two acres at the main gate would not be added to the lease. Configuration of all other landside terminal components (i.e., Main Gate improvements) would be identical to the proposed Project. No dredging would occur and no new wharf would be constructed at Berth 306.

Relative to the CEQA baseline, Alternative 4 would result in fewer environmental impacts than the proposed Project because its operational capacity and level of capital development would be less. These reduced environmental impacts include fewer aesthetic impacts (18 cranes compared to 24 for the proposed Project), fewer air quality impacts (less operational emissions), fewer biological or water

resource impacts (no wharf construction and fewer vessel calls), fewer ground traffic impacts (fewer truck trips), and fewer noise impacts (related to fewer truck trips and no pile diving).

When compared against the NEPA baseline, Alternative 4 would result in fewer environmental impacts than those experienced under the proposed Project. The decreased environmental impacts would occur from fewer construction activities (e.g., no new wharf at Berth 306); reduced operational activity associated with the lower TEU throughput; and direct ship, truck, and rail emissions. These reduced environmental impacts include fewer aesthetic impacts (18 cranes compared to 24 for the proposed Project), fewer air quality impacts (less operational emissions), fewer biological or water resource impacts (no wharf construction), fewer ground traffic impacts (fewer truck trips), and fewer noise impacts (related to fewer truck trips).

Alternative 4 assumes implementation of existing and future legally required measures, such as the installation of AMP and associated infrastructure in compliance with CARB requirements, CAAP measures under the terms of the modified lease that would accompany this alternative, as well as any mitigation measure legally imposed under CEQA and NEPA. Under this alternative, mitigation measures would be applied to reduce emissions from ships, trucks, rail, yard tractors, and yard equipment.

Summary of Alternative 4 Impacts

Unavoidable Significant Impacts

- Air Quality, Meteorology and Greenhouse Gases
- Biological Resources

Less-than-Significant Impacts after Mitigation

- Ground Transportation

Less-than-Significant Impacts

- Aesthetics and Visual Resources
- Cultural Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Marine Transportation
- Noise
- Recreation
- Public Services and Utilities
- Water Quality, Sediments, and Oceanography

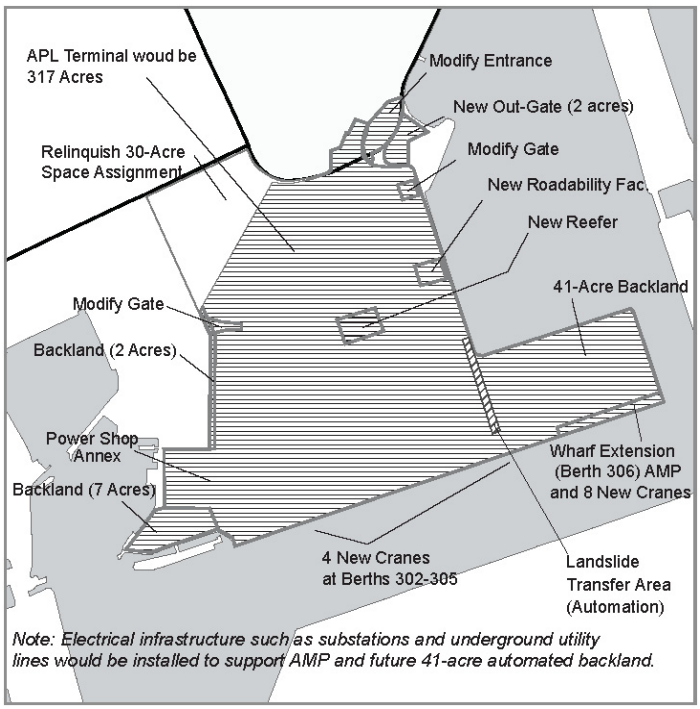
Alternative 5 – Reduced Project: No Space Assignment

Under Alternative 5, the gross terminal acreage of backlands under this alternative would be 317 acres, which is less than the proposed Project. TEU throughput would be the same as the proposed Project, with an expected throughput of approximately 3.2 million TEUs by 2027. This would translate into 390 annual ship calls at Berths 302-305 In addition, this alternative would result in up to 11,361 peak daily truck trips (3,003,157 annual) including drayage, and up to 2,953 annual one-way rail trip movements. Configuration of all other landside terminal components would be identical to the existing terminal.

Alternative 5 would improve the existing terminal, construct a new wharf (1,250 linear feet) creating Berth 306, add 12 new cranes to Berths 302-306, add 56 acres for backlands, wharfs, and gates improvements, construct electrification infrastructure in the backlands behind Berths 305-306, and relinquish the current 30 acres on space assignment. As with the proposed Project, the 41-acre backlands and Berth 306 under Alterative 5 would utilize traditional container operations initially and then over time phase into use of an automated container handling system. Dredging of the Pier 300 Channel along the new wharf at Berth 306 (approximately 20,000 cy) would occur, with the dredged material beneficially

reused, and/or disposed of at an approved disposal site (such as the CDF at Berths 243-245 and/or Cabrillo shallow water habitat) or, if needed, disposed of at an ocean disposal site (i.e., LA-2).

Relative to the CEQA baseline, Alternative 5 would result in similar environmental impacts to the proposed Project because its operational capacity would be the same. These environmental impacts include similar aesthetic impacts (24 cranes for Alternative 5 and the proposed Project), similar air quality impacts (the same operational throughput emissions), similar biological and water resource impacts (similar terminal footprint and the same throughput), similar ground traffic impacts (similar operational truck trips), and similar noise impacts (similar truck trips).



When compared against the NEPA baseline, Alternative 5 would result in approximately the same, or slightly higher, environmental impacts as those experienced under the proposed Project, as the terminal operations would be similar. These environmental impacts include similar aesthetic impacts (24 cranes for Alternative 5 and the proposed Project), slightly higher air quality impacts (related to higher number of workers, equipment and truck trips needed to efficiently process the throughput), similar biological and water resource impacts (similar terminal footprint and the same throughput), slightly higher ground traffic impacts (higher number of workers, equipment, and truck trips to efficiently process the throughput), and similar noise impacts (similar truck trips and construction).

Alternative 5 assumes implementation of existing and future legally required measures, such as the installation of AMP and associated infrastructure in compliance with CARB requirements, CAAP measures under the terms of any modification to the lease that would accompany this alternative, as well as any mitigation measure legally imposed under CEQA and NEPA. Under this alternative, mitigation measures would be applied to reduce emissions from ships, trucks, rail, yard tractors, and yard equipment.

Summary of Alternative 5 Impacts

Unavoidable Significant Impacts

- Air Quality, Meteorology and Greenhouse Gases
- Biological Resources

Less-than-Significant Impacts after Mitigation

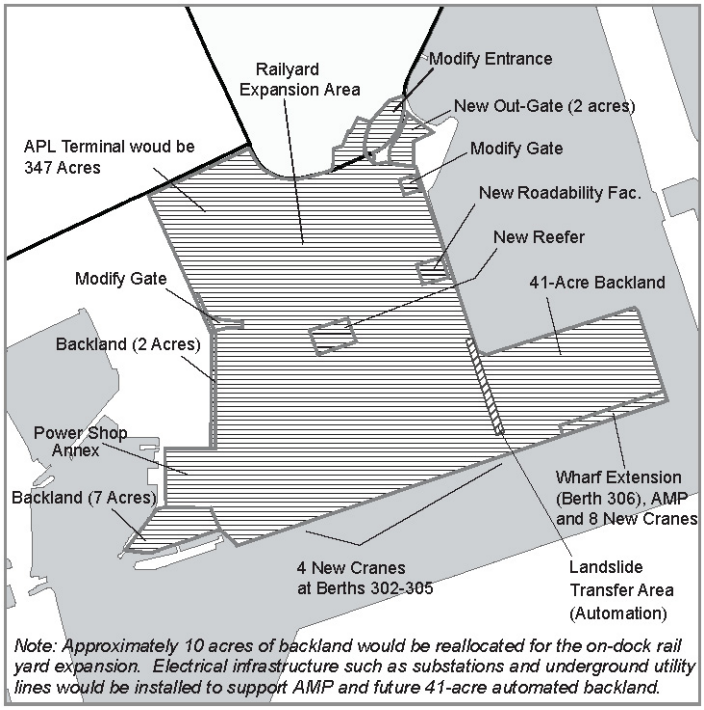
- Ground Transportation
- Noise

Less-than-Significant Impacts

- Aesthetics and Visual Resources
- Cultural Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Marine Transportation
- Recreation
- Public Services and Utilities
- Water Quality, Sediments, and Oceanography

Alternative 6 – Proposed Project with Expanded On-Dock Railyard

Alternative 6 would improve existing terminal, develop the existing 41-acre fill area as backlands, construct electrification infrastructure in the backlands behind Berths 305-306, add 1,250 linear feet of new wharf at Berth 306, and dredge the Pier 300 Channel along Berth 306 (up to 20,000 cubic yards in total could be dredged). Under this Alternative, 12 new cranes would be added to the wharves along Berths 302-306, for a total of 24 cranes. As with the proposed Project, the 41-acre backlands and Berth 306 under Alterative 6 could utilize traditional container operations, electric automated operations, or a combination of the two over time. Dredging of the Pier 300 Channel along Berth 306 would occur (removal of approximately 20,000 cy of material), with the dredged material beneficially reused and/or disposed of at an approved disposal site (such as the CDF at Berths 243-245 and/or Cabrillo shallow water habitat) or, if needed, disposed of at an ocean disposal site (i.e., LA-2).



This alternative would be the same as the proposed Project; however, LAHD would redevelop and expand the existing on-dock railyard. The current on-dock railyard can accommodate up to 64 five-platform double-track railcars (equivalent to nearly three full trains) and consists of 8 sets of double tracks. Maximum throughput capacity through the facility is estimated to be approximately 1.04 million TEUs per year. The expansion of the on-dock facility under Alternative 6 would involve the addition of a ninth set of double tracks, and expand this component's throughput capacity to approximately 1.15 million TEUs per year. Under this alternative, approximately 10 acres of backlands would be removed from

container storage for the railyard expansion. Under Alternative 6, the total gross terminal acreage would be 347 acres and the TEU throughput would be the same as the proposed Project.

Based on the throughput projections, TEU throughput would be the same as the proposed Project, with an expected throughput of approximately 3.2 million TEUs by 2027. This would translate into 390 annual ship calls at Berths 302-306. In addition, Alternative 6 would result in up to 10,830 peak daily truck trips (2,862,760 annual), and up to 2,953 annual rail trip movements. Configuration of all other landside terminal components would be identical to the existing terminal.

Relative to the CEQA baseline, Alternative 6 would result in similar or slightly less environmental impacts to the proposed Project because its operational capacity would be the same. These environmental impacts include similar aesthetic impacts (24 cranes for Alternative 6 and the proposed Project), similar but slightly less air quality impacts (due to increased use of on-dock rail facilities and less truck trips for drayage), equal biological or water resource impacts, and similar but slightly reduced ground traffic impacts (slightly less operational truck trips).

When compared against the NEPA baseline, Alternative 6 would result in approximately the same environmental impacts as those experienced under the proposed Project, as the terminal operations would be similar. These environmental impacts include similar aesthetic impacts (24 cranes for Alternative 6 and the proposed Project), similar but slightly less air quality impacts (from fewer truck trips associated with drayage due to increased on-dock rail usages), the same biological or water resource impacts, and similar but slightly fewer ground traffic impacts (slightly less operational truck trips).

Alternative 6 assumes implementation of existing and future legally required measures, such as the installation of AMP and associated infrastructure in compliance with CARB requirements, CAAP measures under the terms of any modification to the lease that would accompany this alternative as well as any mitigation measure legally imposed under CEQA and NEPA. Under this alternative, mitigation measures would be applied to reduce emissions from ships, trucks, rail, yard tractors, and yard equipment.

Summary of Alternative 6 Impacts

Unavoidable Significant Impacts

- Air Quality, Meteorology and Greenhouse Gases
- Biological Resources

Less-than-Significant Impacts after Mitigation

- Ground Transportation
- Noise

Less-than-Significant Impacts

- Aesthetics and Visual Resources
- Cultural Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Marine Transportation
- Recreation
- Public Services and Utilities
- Water Quality, Sediments, and Oceanography

The following key issues have been identified as potential areas of interest or concern to the local community based on previous Port activities. The issues covered are:

- Air Quality
- Ground Transportation
- Economic Benefits

Key Community Issue: Air Quality

The criteria pollutants[2] of greatest concern in the air quality assessment are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). Nitrogen oxides (NOx) and sulfur oxides (SOx) are the generic terms for NO_2 and SO_2, respectively, because NO_2 and SO_2 are naturally highly reactive and may change composition when exposed to oxygen, other pollutants, and/or sunlight in the atmosphere. These oxides are produced during combustion.

***Key* Definitions**

PM_{10} = particulate matter of less than or equal to 10 micrometers in aerodynamic diameter

$PM_{2.5}$: = particulate matter of less than or equal to 2.5 micrometers in aerodynamic

The Port uses the South Coast Air Quality Management District's (SCAQMD) thresholds to determine significance. For the air quality analysis, the CEQA baseline (July 1, 2008 to June 31, 2009) is subtracted from the project emissions at different years and the difference is compared to the SCAQMD thresholds for emissions. Table 2 shows the thresholds applied to determine CEQA and NEPA significance for construction emissions and operational emissions.

Also shown are the thresholds used to determine significant cancer, acute non-cancer, and chronic non-cancer health risk impacts from toxic air contaminant (TAC) emissions of concern, which are components of VOC and PM_{10} emissions. Health risk assessments were completed for each alternative to estimate if current or future exposures to TACs could result in health risks to a broad population. The calculated risk levels were then compared to the risk levels provided in Table 2 to determine the health risk impacts.

Table 2: Construction and Operational Emissions Thresholds

	VOC	NOx	SOx	PM_{10}	$PM_{2.5}$	CO	Cancer Risk	Acute Non-Cancer	Chronic Non-Cancer
Operation	55 lbs/day 10 tons/year	55 lbs/day	150 lbs/day	150 lbs/day	55 lbs/day	550 lbs/day	10 in a million	1.0	1.0
Construction	75 lbs/day 10 tons/year	100 lbs/day	150 lbs/day	150 lbs/day	55 lbs/day	550 lbs/day			

Baseline Emissions

The CEQA baseline includes emissions from sources that were operating in the baseline year of July 1, 2008 to June 31, 2009. During the baseline period, the proposed Project area included a container throughput of 1,128,080 TEUs and 247 annual ship calls that occurred on the 291-acre APL Terminal. Emission sources during the baseline period include ships and tugboats, locomotives, trucks, cargo-handling equipment, and worker commute trips.

The NEPA baseline includes the full range of construction and operational activities the applicant could implement and is likely to implement absent a federal action, in this case the issuance of a USACE permit. The NEPA baseline includes minor terminal improvements in the upland area, operation of the 291-acre APL terminal, and assumes that by 2027, the terminal handles up to approximately 2.15 million TEUs annually and accommodates 286 annual ships calls and up to 572 associated tug boat trips. Because the NEPA baseline is dynamic, it includes different levels of terminal operations without the Project at each study year (2012, 2015, 2020, 2025, and 2027).

[2] These pollutants are called "criteria pollutants" by the USEPA because they are regulated by human health-based and/or environmentally-based criteria (science-based guidelines).

Construction-Related Emissions

Unmitigated Project

Construction-related emissions are assumed to begin in 2012 and continue for two years. Figure 9 presents the maximum daily criteria pollutant emissions associated with construction of the proposed Project without mitigation. As shown below, the proposed Project unmitigated peak daily emissions minus the CEQA baseline would be above CEQA thresholds and thus significant under CEQA and NEPA for VOC, CO, NOx, PM_{10} and $PM_{2.5}$ during the 2012 peak year of construction, as well as during 2013.

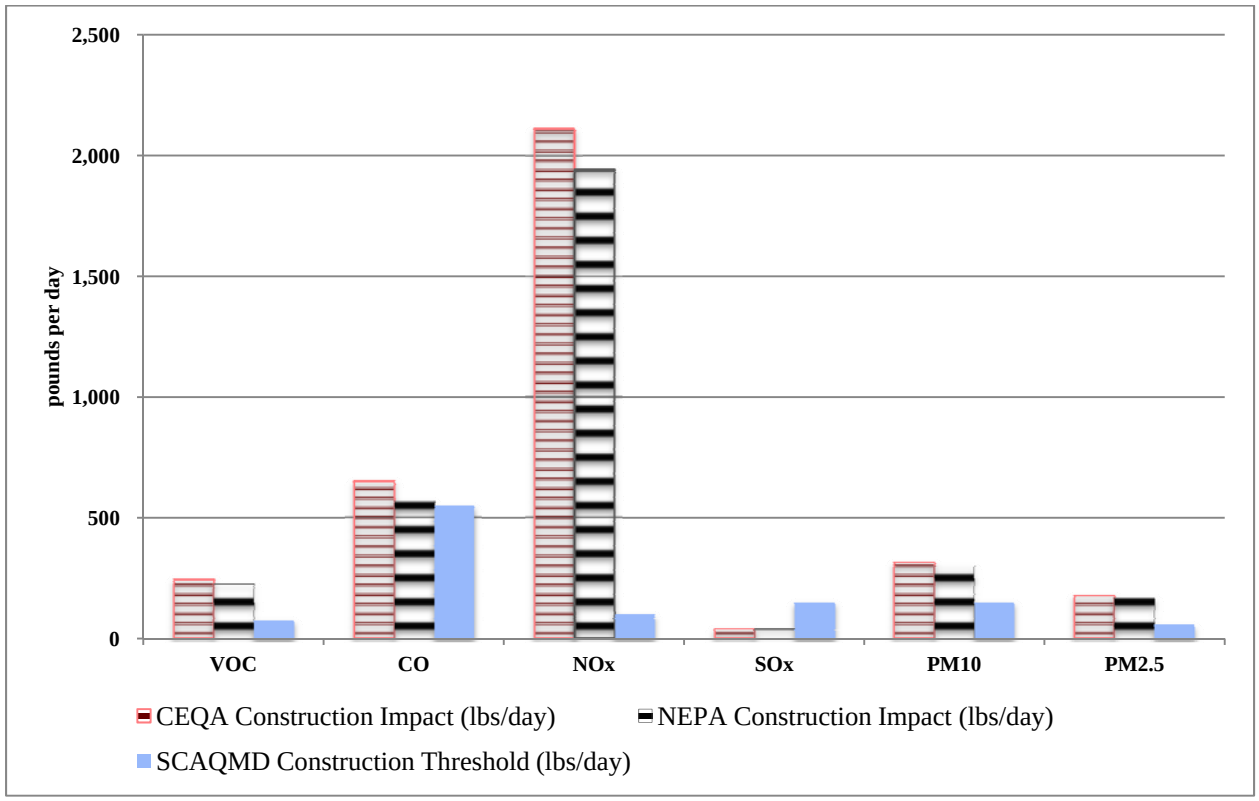


Figure 9: Peak Daily Construction Emissions: Unmitigated Project.

Mitigated Project

The mitigation measures included for construction and operations were based on Port-recommended measures, the Port of Los Angeles Sustainable Construction Guidelines, and the San Pedro Bay Ports Clean Air Action Plan (CAAP). The mitigation measures briefly described below would reduce criteria pollutant emissions associated with Project construction. These mitigation measures would apply to all construction activities (*See Section 3.2.4 in Section 3.2, Air Quality, Meteorology, and Greenhouse Gases, of the Draft EIS/EIR, for a full analysis.*).

- **MM AQ-1** ***Harbor Craft Used during Construction*****.** As of January 1, 2011, all harborcraft with USEPA designated Category 1 (C1) or Category 2 (C2) marine engines must utilize a USEPA Tier 3 engine, or cleaner; however a few exceptions may apply to this mitigation.
- **MM AQ-2** ***Cargo Ships Used During Construction*****.** All ships and barges used primary to deliver construction-related materials to a LAHD-contractor construction site shall comply with the expanded Vessel Speed Reduction Program (VSRP) of 12 knots between 40 nautical miles (nm) from Point Fermin and the Precautionary Area**.**
- **MM AQ-3** ***Fleet Modernization for On-Road Trucks Using During Construction***. Trucks hauling materials such as debris or any fill material will be fully covered while operating off Port property, idling will be restricted to a maximum of 5 minute when not in use, and the trucks shall follow an acceleration of the USEPA emission standards.
- **MM AQ-4** ***Fleet Modernization for Construction Equipment (except Vessels, Harbor Craft and On-Road Trucks)***. Construction equipment will incorporate, where feasible, emissions-saving technology such as hybrid drives and specific fuel economy standards; idling will be restricted to a maximum of 5 minutes when not in use; and, equipment must meet specific engine specifications.
- **MM AQ-5** **Construction** ***Best Management Practices (BMPs)***. BMPs would be implemented to reduce air emissions from construction activities.
- **MM AQ-6** ***Additional Fugitive Dust Controls***. Applicable Rule 403 measures/BMPs to reduce dust should be included in the contractor's Fugitive Dust Control Plan, at a minimum.
- **MM AQ-7** ***General Mitigation Measure***. For any of the above mitigation measure (MM AQ-1 through MM AQ-6), if a CARB-certified technology becomes available and is shown to be as good as or better in terms of emission performance than the existing measure, the technology would replace the existing measure pending approval by the Port. Measures will be set at the time a specific construction contract is advertised for bids.
- **MM AQ-8** ***Special Precautions near Sensitive Sites***. All construction activities located within 1,000 feet of sensitive receptors (defined as schools, playgrounds, daycares, and hospitals) shall notify each of these sites in writing at least 30 days before construction activities begin.

After application of mitigation, construction emissions under both CEQA and NEPA would continue to exceed the thresholds for VOC, CO, NOx, and $PM_{2.5}$; construction emissions would continue to be significant for PM_{10} under NEPA. After application of mitigation, the proposed Project would continue to exceed the VOC threshold for operational emissions in 2025 and 2027 under CEQA. From a NEPA perspective, the proposed Project peak daily emissions after mitigation would remain significant and unavoidable for VOC, CO, NOx, and $PM_{2.5}$ in 2015, 2020, 2025, and 2027 and PM_{10} in 2025 and 2027. Figure 10 illustrates the mitigated criteria pollutant emissions associated with the construction of the proposed Project. *Please see the discussion in Section 3.2 of the Draft EIS/EIR for a complete discussion of criteria pollutants.*

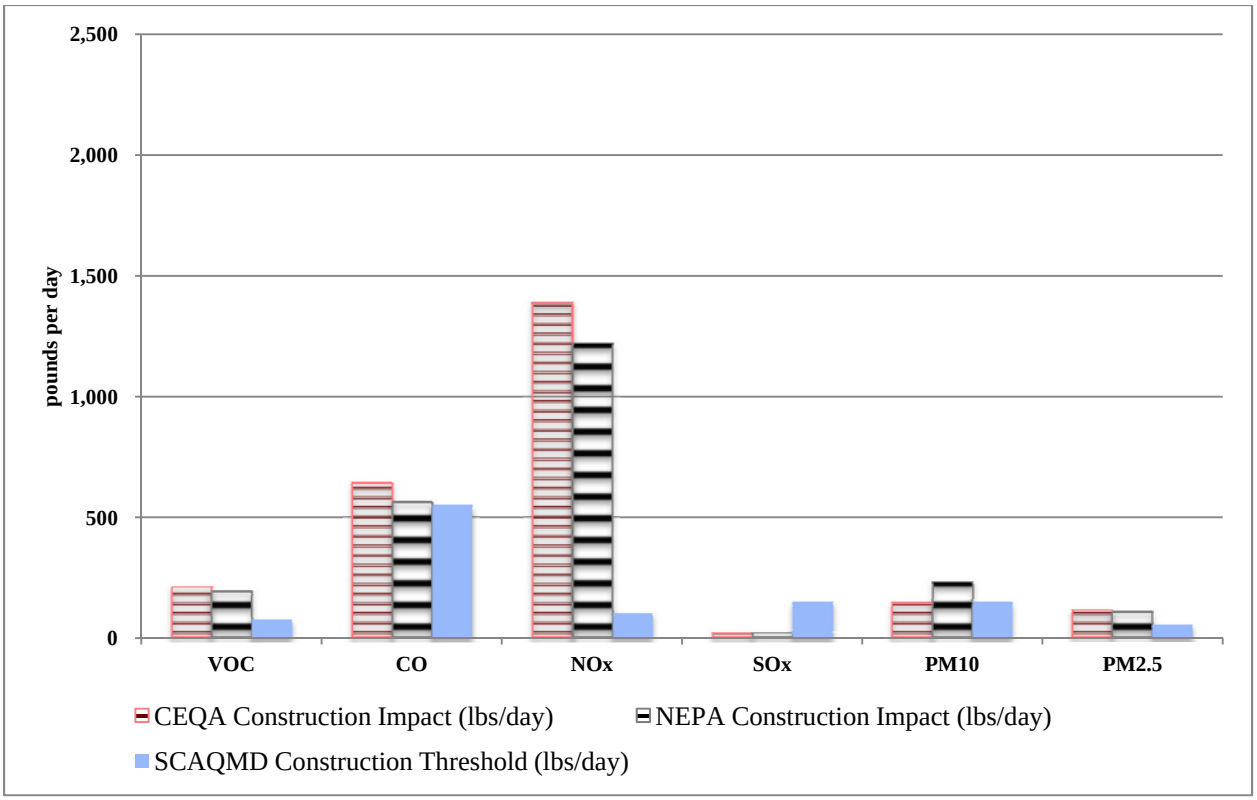


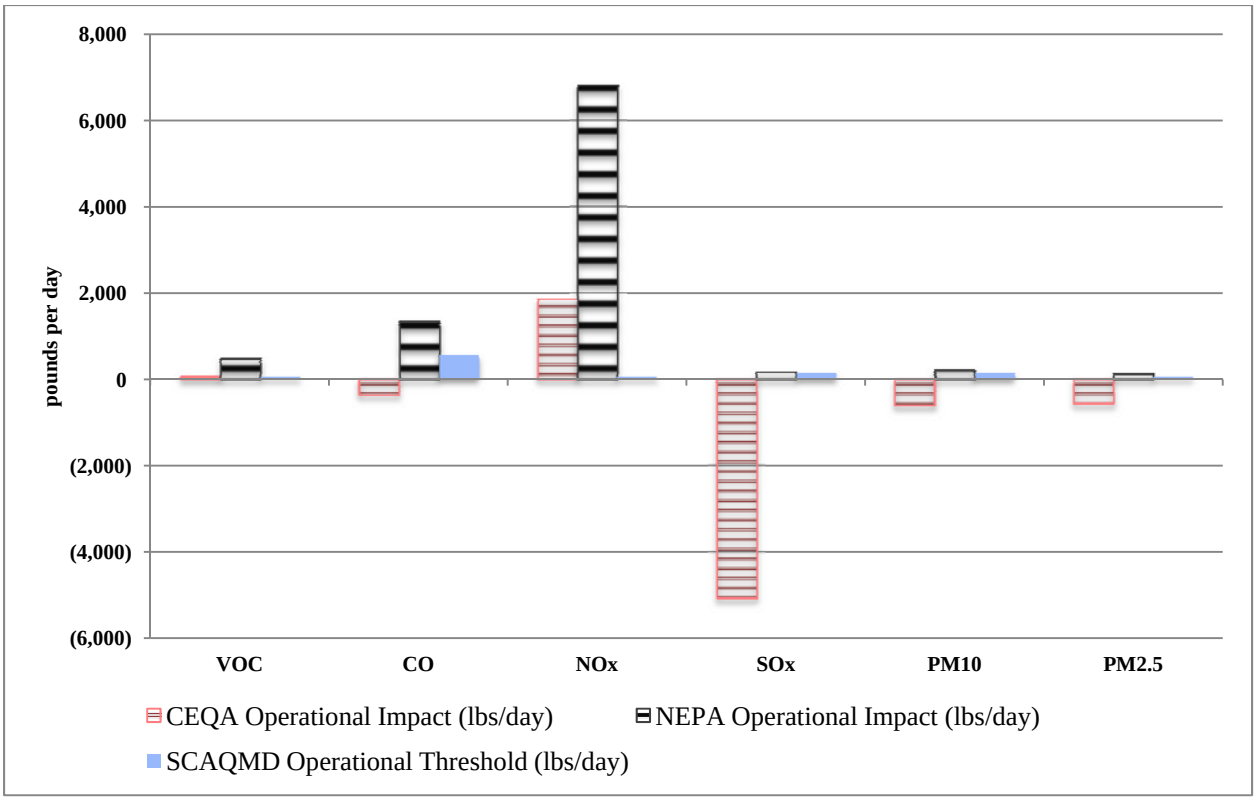
Figure 10: Peak Daily Construction Emissions: Mitigated Project.

The proposed Project construction would overlap with operational activities during study year 2012. Therefore, the unmitigated combined total of operational and construction emissions for 2012, during which construction and operational activities would occur simultaneously, were evaluated in the air quality analysis. For the year 2012, the combined total of construction and operational proposed Project unmitigated impacts is expected to be less than significant for all pollutants under CEQA, and significant under NEPA for VOC, CO, NOx, PM_{10} and $PM_{2.5}$.

Operational-Related Emissions

Unmitigated Project

Operational emissions are assessed in 2012, 2015, 2020, 2025, and 2027. The proposed Project operational unmitigated peak daily emissions minus the CEQA baseline would be significant for NOx in study years 2015, 2025 and 2027 and VOC in 2027. From a NEPA perspective, the unmitigated air quality impacts associated with proposed Project operations would be significant for VOC, CO, NOx, PM_{10} and $PM_{2.5}$ in 2015, 2020, 2025, and 2027 and for SOx in 2025 and 2027. Figure 11 illustrates the unmitigated CEQA and NEPA impacts for proposed Project operations.



Notes: Negative CEQA or NEPA impacts occur when the CEQA or NEPA baseline emissions are greater than the proposed Project.

Figure 11: Peak Daily Operational Emissions: Unmitigated Project.

Mitigated Project

The following mitigation measures would reduce criteria pollutant emissions associated with the proposed Project operations. *These mitigation measures would be implemented by the responsible parties identified in Section 3.2.5 of the Draft EIS/EIR.*

- **MM AQ-9** ***Alternative Maritime Power (AMP)***. APL ships calling at Berths 302-306 must use AMP for 70 percent of total ship calls in 2017 and 95 percent of total ship calls in 2026 while hoteling in the Port.
- **MM AQ-10** ***Vessel Speed Reduction Program (VSRP)***. By 2014 and thereafter, 95 percent of all ships calling at Berths 302-306 shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area.
- **MM AQ-11** ***Cleaner Ocean-Going Vessel (OGV) Engines***. The Tenant shall seek to maximize the number of vessels calling at the Berths 302-306 terminal that meet the International Maritime Organization (IMO) NOx limit of 3.4 grams per kilowatt-hour (g/kW-hr).
- **MM AQ-12** ***OGV Engine Emissions Reduction Technology Improvements***. When using or retrofitting existing ships bound for the Port of Los Angeles, the Tenant shall determine the feasibility of incorporating all emission reduction technology and/or design options.
- **MM AQ-13** ***Yard Tractors at Berths 302-306 Terminal***. By the end of 2013, all yard tractors operated at the terminal shall meet USEPA Tier 4 non-road or 2007 on-road emission standards.

- **MM AQ-14** ***Yard Equipment at Berths 302-306 Railyard***. All diesel-powered equipment operated at the Berths 302-306 terminal railyard shall implement the requirements discussed below in **MM AQ-15**.
- **MM AQ-15** ***Yard Equipment at Berths 302-306 Terminal***. By the end of 2012, all terminal equipment equipped with Tier 1 and 2 engines less than 750 horsepower (hp) must meet 2010 on-road or Tier 4 standards, and the highest available Verified Diesel Emissions Controls (VDECs) shall be installed on all Tier 3 equipment. By the end of 2015, all terminal equipment equipped with Tier 3 engines shall meet USEPA Tier 4 non-road engine standards.
- **MM AQ-16** ***Truck Idling Reduction Measures***. Within six months of the effective date and thereafter for the remaining term of the Permit and any holdover, the terminal operator shall ensure that truck idling is reduced to less than 30 minutes in total or 10 minutes at any time while on the terminal.

The following Air Quality, Meteorology, and Greenhouse Gases lease measures would be required by the Port for the proposed Project and Alternatives 2 through 6:

- **LM AQ-1** ***Periodic Review of New Technology and Regulations.*** The Port shall require the Berths 302-306 tenant to review, in terms of feasibility and benefits, any Port-identified or other new emissions-reduction technology, and report to the Port. Such technology feasibility reviews shall take place at the time of the Port's consideration of any lease amendment or facility modification for the proposed Project site. If the technology is determined by the Port to be feasible in terms of cost, technical and operational feasibility, the tenant shall work with the Port to implement such technology.

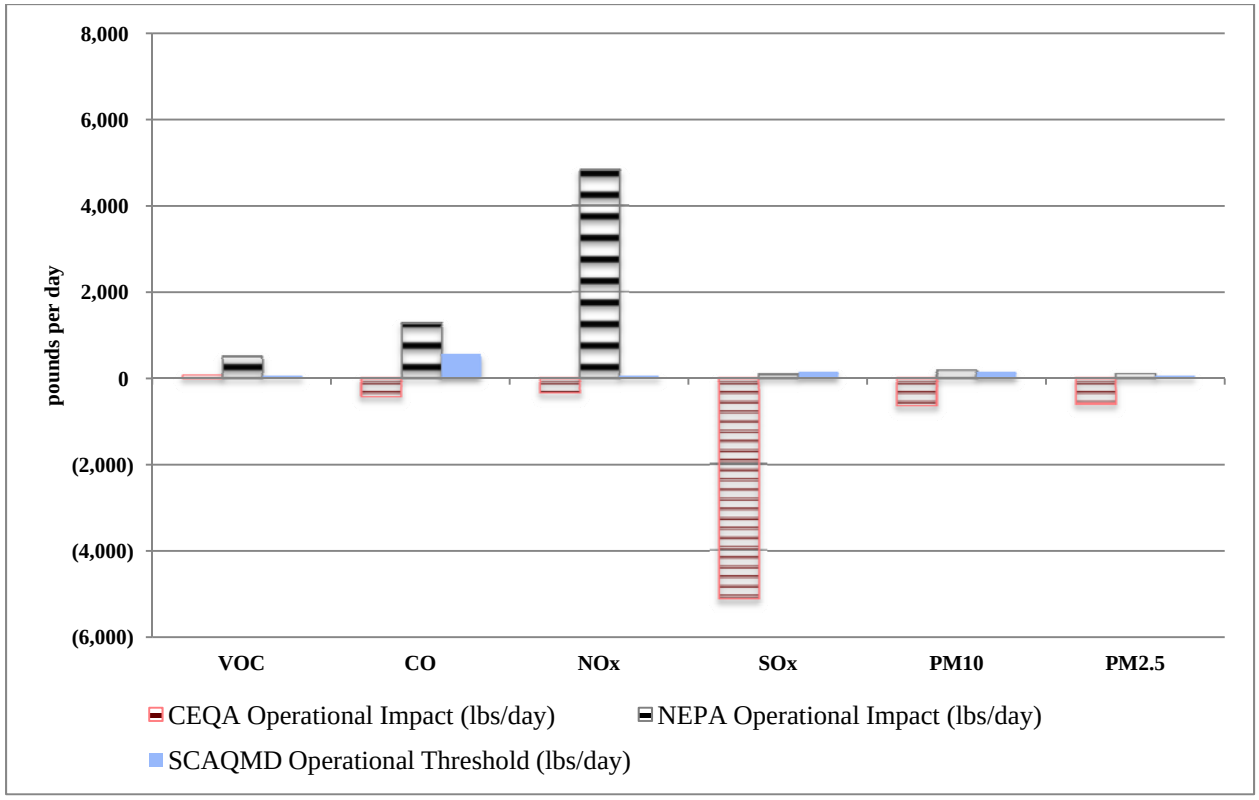
  Potential technologies that may further reduce emission and/or result in cost-savings benefits for the tenant may be identified through future work on the CAAP, Technology Advancement Program, Zero Emissions Technology Program, and terminal automation. Over the course of the lease, the tenant and the Port shall work together to identify potential new technologies. Such technology shall be studied for feasibility, in terms of cost, technical and operational feasibility, and emissions reduction benefits.

  As partial consideration for the Port agreement to issue the permit to the tenant, the tenant shall implement not less frequently than once every 7 years following the effective date of the permit, new air quality technological advancements, subject to mutual agreement on operational feasibility and cost sharing, which shall not be unreasonably withheld.

  The effectiveness of this measure depends on the advancement of new technologies and the outcome of future feasibility or pilot studies. As discussed in Section 3.2.4.1, if the tenant requests future Project changes that would require environmental clearance and a lease amendment, future CAAP mitigation measures would be incorporated into the new lease at that time.

- **LM AQ-2:** ***Substitution of New Technology.*** If any kind of technology becomes available and is shown to be as good or as better in terms of emissions reduction performance than the existing measure, the technology could replace the existing measure pending approval by the Port of Los Angeles. The technology's emissions reductions must be verifiable through USEPA, CARB, or other reputable certification and/or demonstration studies to the Port's satisfaction.

After application of mitigation and lease measures, the proposed Project would continue to exceed the VOC threshold for operational emissions in 2027 under CEQA. From a NEPA perspective, the proposed Project peak daily emissions after mitigation would remain significant and unavoidable for VOC, CO, NOx, and $PM_{2.5}$ in 2015, 2020, 2025, and 2027 and PM_{10} in 2012, 2020, 2025 and 2027. Figure 12 illustrates the mitigated CEQA and NEPA impacts for proposed Project operations.



Notes: Negative CEQA or NEPA impacts occur when the CEQA or NEPA baseline emissions are greater than the proposed Project.

Figure 12: Peak Daily Operational Emissions: Mitigated Project.

Health Risk Impacts

Health risk assessments (HRAs) discuss average risks over time from all types of environmental pollution and lifestyle choices. An HRA is a quantitative analysis of TAC emission levels as compared to accepted thresholds for health risk impacts by pollutant. For example, emissions of a specific pollutant would need to exceed certain published emission levels before emissions would be found to have a negative health effect. The California Office of Environmental Health Hazard Assessment (OEHHA) assists with the scientific evaluation of risk and publishes the thresholds and guidelines for completing HRAs. HRAs are tools used by regulators to predict the risk related to a certain level of exposure and base decisions, often land use planning and consumption advisories, on the estimated risk.

HRAs are not diagnosis studies and they will not determine whether a current health problem or symptom was caused by exposure to a pollutant. Epidemiological studies look at past exposure and try to link that exposure, often in a population, to a disease. HRAs estimate if *current* or *future* exposures will result in health risks to a broad population. HRAs commonly report cancer risk as some additional risk in a large population. For example, risk expressed as 1 in a million means that there is a chance of one in a 1,000,000 people of an event occurring. Regulators set acceptable risk values for TACs. These risk numbers are derived from conservative assumptions meant to protect the most vulnerable of a community's citizens. For example, to estimate a residential receptor's risk from air contaminants, the standard model assumes the resident (person) is exposed to the air contaminants while breathing at the 80th percentile[3] breathing rate for 24 hours a day, 350 days a year, over a 70 year period.

The Port of Los Angeles has adopted the threshold of less than 10 in a million as being an acceptable increased cancer risk level for new projects. HRAs also examine the risks from acute and chronic non-cancer exposure. For acute and chronic non-cancer exposure, we use the reference exposure levels (RELs) developed by the California Office of Environmental Health Hazards Assessments (OEHHA). A REL is the concentration level at or below which no adverse health effects are anticipated for specific exposure duration. A Hazard Index (HI) of 1.0 or less indicated that the exposure would present an acceptable or insignificant health risk (i.e., no adverse health impact).

Baseline

The SCAQMD published the third Multiple Air Toxics Exposure Study (MATES-III) in September 2008. MATES III characterizes the ambient air concentrations (i.e., air concentrations present in the immediate surroundings, or the background) and potential human exposures in the South Coast Air Basin (SCAB). MATES-III developed an updated TAC inventory and conducted air dispersion modeling to estimate ambient levels and the potential health risks of TACs. The study identified the area covering the two ports, including the proposed Project site, were predicted to have cancer risk values ranging from 1,100 to 2,900 in a million. The highest modeled risk in the SCAB was at the Ports.

Unmitigated Project

Table 3 shows that the maximum CEQA cancer risk increments for residential and occupational receptors would exceed the SCAQMD thresholds of significance. The locations identified for the peak residential impact are at the liveaboards (people who live on boats) for boats docked west of Terminal Island Freeway at Anchorage Road. The cancer risk increment would also exceed the significance threshold at the liveaboards docked in Fish Harbor west of the Project site. However, residential incremental cancer risk would not exceed the significance threshold at any residential areas on the mainland.

The maximum NEPA cancer risk increments for all receptors are less than the significance thresholds for all receptor types. The peak impact location is the same as for the CEQA increment – the liveaboards anchored just west of Terminal Island Freeway at Anchorage Road. The major source of diesel particulate matter emissions which determines cancer risk are container trucks traveling on the roadways

[3] A percentile is the value of a variable at which a certain percentage of observations fall. For example, the 80th percentile breathing rate means that 80 percent of the population is expected to have a certain breathing rate.

to and from the terminal. The unmitigated risk impacts take into account the emission reductions associated with Federal and state regulations and parts of the CAAP currently being implemented such as the Clean Truck Program (CTP); which will improve emissions in future study years.

As shown in Table 3, chronic risk increments associated with the unmitigated proposed Project are predicted to be less than the CEQA baseline. In addition, the NEPA incremental chronic risks would be below the SCAQMD thresholds of significance.

The acute risk under both CEQA and NEPA is driven mainly by construction activity. Construction activity has higher emissions on a short-term basis than proposed Project operations. Therefore, because the construction emissions under NEPA are minimal (the No Federal Action construction includes only minor terminal improvements), the CEQA and NEPA acute risk impacts are approximately the same. The acute risk therefore under both CEQA and NEPA associated with residential and occupational receptors would exceed the SCAQMD significance criterion hazard index of 1.0. The maximum residential impacts occur near the Federal prison to the west of the proposed Project boundary. The maximum occupational impact occurs on Pier 400 approximately 400 meters (1,300 feet) south of the proposed Project boundary.

Mitigated Project

The mitigated proposed Project HRA results are shown in Table 4 for those risks that were significant in the unmitigated scenario. The mitigation measures would reduce the maximum CEQA cancer risk increments associated with the proposed Project; however, the incremental cancer risks at the maximum exposed residential and occupational receptors would remain significant and unavoidable. The maximum acute risk at residential receptors would be reduced to less than significant levels. The maximum acute risk at occupational receptors remains significant and unavoidable. *Please refer to Appendix E3, Health Risk Assessment, for a more detailed discussion.*

Table 3: Maximum Health Impacts Associated With The Proposed Project Without Mitigation, 2012 - 2081

Health Impact	Receptor Type	Maximum Predicted Impact[a,d]		Significance Threshold
		CEQA Increment[b,c]	NEPA Increment[b,c]	
Cancer Risk[f]	Residential[e]	**25 x 10^{-6} (25 in a million)**	7 x 10^{-6} (7 in a million)	10×10^{-6} 10 in a million
	Occupational	**16 x 10^{-6} (16 in a million)**	7 x 10^{-6} (7 in a million)	
	Sensitive	7 x 10^{-6} (7 in a million)	2 x 10^{-6} (2 in a million)	
	Student	0.2 x 10^{-6} (0.2 in a million)	0.2 x 10^{-6} (0.2 in a million)	
	Recreational	3 x 10^{-6} (3 in a million)	0.9 x 10^{-6} (0.9 in a million)	
Chronic Hazard Index	Residential	< 0 [g]	0.1	1.0
	Occupational	< 0 [g]	0.2	
	Sensitive	< 0 [g]	0.0	
	Student	< 0 [g]	0.0	
	Recreational	< 0 [g]	0.0	
Acute Hazard Index	Residential	**1.2**	**1.2**	1.0
	Occupational	**1.8**	**1.8**	
	Sensitive	0.4	0.4	
	Student	0.4	0.4	
	Recreational	0.5	0.5	

Notes:

a) Exceedances of the significance criteria are in **bold**. The significance thresholds apply to the CEQA and NEPA increments only.

b) The maximum increments might not necessarily occur at the same receptor locations as the maximum impacts. This means that the increments cannot necessarily be determined by simply subtracting the baseline impacts from the Project impact. The example given in the text, before the CEQA Impact Determination, illustrates how the increments are calculated.

c) The CEQA increment represents Project minus CEQA baseline. The NEPA increment represents Project minus NEPA baseline..

d) Data represent the receptor locations with the maximum impacts or increments. The impacts or increments at all other receptors would be less than these values.

e) The cancer risk values reported in this table for the residential receptor are based on the 80th percentile breathing rate.

f) Construction emissions were modeled with the operational emissions for the determination of cancer risk.

g) When the predicted impact is less than zero, the Project risk is less than the respective baseline.

Table 4: Maximum Health Impacts Associated With The Proposed Project With Mitigation, 2012 - 2081

Health Impact	Receptor Type	Maximum Predicted Impact[a,d]		Significance Threshold
		CEQA Increment[b,c]	NEPA Increment[b,c]	
Cancer Risk[f]	Residential	**23×10^{-6} (23 in a million)**	6×10^{-6} (6 in a million)	10×10^{-6} 10 in a million
	Occupational	**11×10^{-6} (11 in a million)**	6×10^{-6} (6 in a million)	
Acute Hazard Index	Residential	0.9	0.9	1.0
	Occupational	**1.1**	**1.1**	

Notes:

a) Exceedances of the significance criteria are in **bold**. The significance thresholds apply to the CEQA and NEPA increments only.

b) The maximum increments might not necessarily occur at the same receptor locations as the maximum impacts. This means that the increments cannot necessarily be determined by simply subtracting the baseline impacts from the proposed Project impact. The example given in the text, before the CEQA Impact Determination, illustrates how the increments are calculated.

c) The CEQA increment represents proposed Project minus CEQA baseline. The NEPA increment represents proposed Project minus NEPA baseline.

d) Data represent the receptor locations with the maximum impacts or increments. The impacts or increments at all other receptors would be less than these values.

e) The cancer risk values reported in this table for the residential receptor are based on the 80th percentile breathing rate.

f) Construction emissions were modeled with the operational emissions for the determination of cancer risk.

g) When the predicted impact is less than zero, the Project risk is less than the respective baseline.

Greenhouse Gas Emissions

The air quality analysis for the proposed Project and alternatives includes estimates of greenhouse gas (GHG) emissions. The emission sources for which baseline GHG emissions were calculated include ships and tugboats, locomotives, cargo-handling equipment (CHE), trucks, worker vehicles, on-terminal electricity usage, and on-terminal refrigerant usage. The proposed Project includes emissions from electricity usage from AMP. Construction and operational GHG emissions would exceed the baseline; therefore, emissions of the Project-related to GHGs would be significant. Figure 13 illustrates the various construction activities associated with the proposed Project and the percentage of GHG emissions associated with each phase. *Please refer to Section 3.2.4.3 in Section 3.2, Air Quality, Meteorology, and Greenhouse Gas, of the Draft EIR, for a more detailed discussion of the GHG impact analysis.*

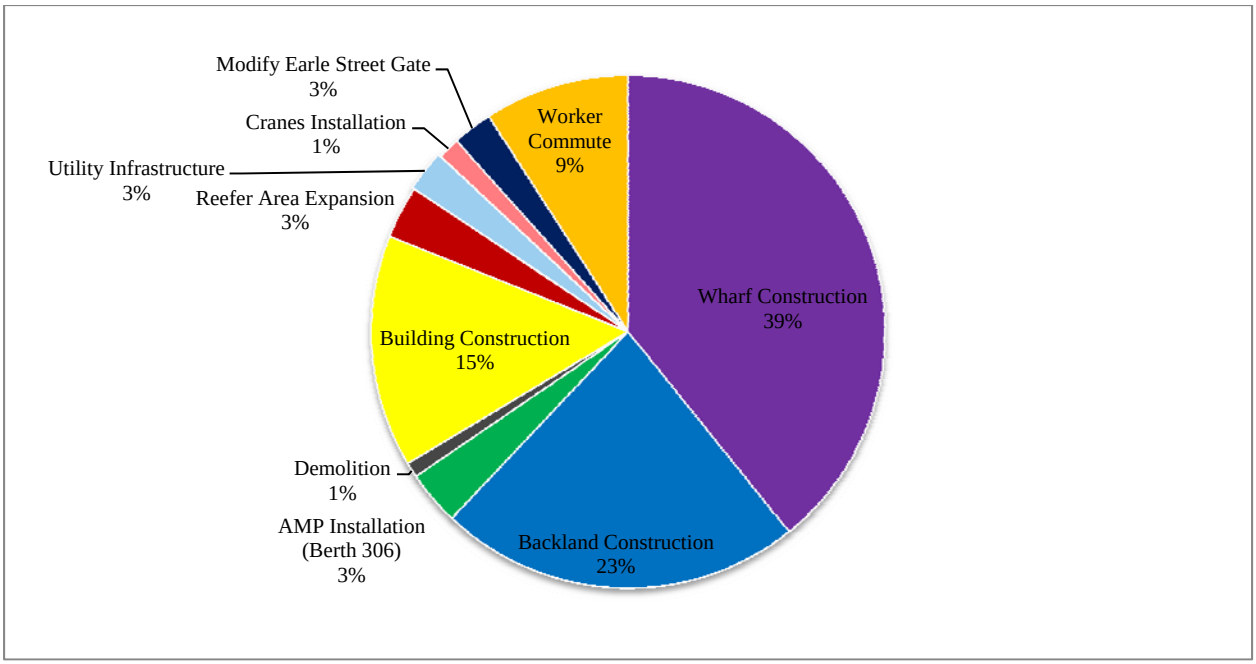


Figure 13: Total GHG Emissions from Berths 302-306 Terminal Construction Activities – Proposed Project.

Mitigated Project

The following mitigation measures would reduce GHG emissions associated with the proposed Project operations.

- **MM AQ-17** ***Compact Fluorescent Light Bulbs***. All interior buildings on the premises shall exclusively use fluorescent light bulbs, compact fluorescent light bulbs, or a technology with similar energy-saving capabilities, for ambient lighting within all terminal buildings. The tenant shall also maintain and replace any Port-supplied compact fluorescent light bulbs.
- **MM AQ-18** ***Energy Audit***. The tenant shall conduct an energy audit by a third party of its choice every 5 years and install innovative power saving technology (1) where it is feasible, and (2) where the amount of savings would be reasonably sufficient to cover the costs of implementation .
- **MM AQ-19** ***Recycling***. The tenant shall ensure a minimum of 40 percent of all waste generated in all terminal buildings is recycled by 2014 and 60 percent of all waste generated in all terminal buildings is recycled by 2016.
- **MM AQ-20** ***Tree Planting***. The applicant shall plant shade trees around the main terminal building, and the tenant shall maintain all trees through the life of the lease.

After application of mitigation, the proposed Project would continue to exceed the baseline GHG emissions and would be significant and unavoidable. Figure 14 illustrates the unmitigated and mitigated impacts for proposed Project operations.

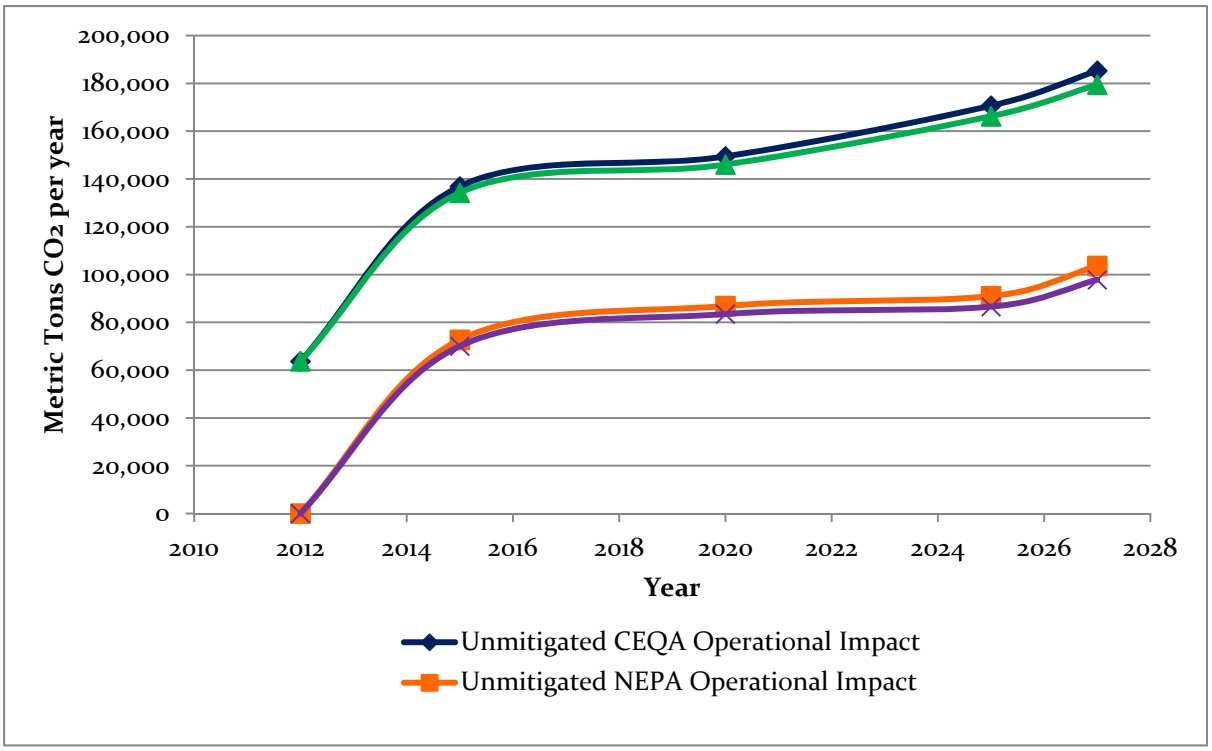


Figure 14: Maximum Annual Operational Emissions: Unmitigated and Mitigated Project.

Ultrafine Particles

Research is being done on ultrafine particles (UFPs), particles classified as less than 0.1 micron in diameter. UFPs are formed usually by a combustion cycle, independent of fuel type. UFPs are emitted directly from the tailpipe as solid particles (soot-elemental carbon and metal oxides) and semivolatile particles (sulfates and hydrocarbons) that coagulate to form particles.

The research regarding UFPs suggests the UFPs might be more dangerous to human health than the larger PM_{10} and $PM_{2.5}$ particles (termed fine particles) due to size and shape. Because of the smaller size, UFPs are able to travel more deeply into the lung (the alveoli) and are deposited in the deep lung regions more efficiently than fine particles. Recent studies have found that UFPs may also pose a risk to cardiovascular health, particular in at-risk individuals, and may be a risk-factor for heart arrhythmias.

CARB is currently measuring and studying UFPs at the Port Complex. The University of California, in collaboration with CARB and Cal/EPA, released a study in April 2011 investigating UFP concentrations within communities in Los Angeles, including the port area of San Pedro and Long Beach (USC, 2011). The study found that UFP concentrations vary significantly near the Ports (a major UFP source) and therefore substantiated concerns about the applicability of using centrally-located UFP concentrations for estimating population exposure.

Current UFP research primarily involves roadway exposure. Preliminary studies suggest that over 50 percent of an individual's daily exposure is from driving on highways. Levels appear to drop off rapidly as one moves away from major roadways. Work is being done on filter technology, including filters for ships, which appears promising. The Port began collecting UFP data at its four air quality monitoring stations in late 2007 and early 2008. In addition, the Port actively participates in the CARB testing at the Port and will comply with all future regulations regarding UFPs. Measures included in the CAAP aim to reduce all emissions Port-wide. *Please refer to Section 3.2 of the Draft EIS/EIR for a more detailed discussion on Ultrafine Particles.*

Key Community Issue: Ground Transportation

A transportation analysis was conducted to determine if current infrastructure surrounding the proposed Project is suitable and can accommodate the increased volume of vehicular traffic anticipated by the proposed Project. The transportation analysis included 5 freeway/roadway segments and 15 key intersections that would be used by trucks and automobiles for access to and from the proposed Project site. To meet CEQA and NEPA requirements, the transportation analysis must review all potential traffic impacts of the proposed Project at expected build-out and optimal full capacity by 2027. Currently there are no intersections operating at a failing Level of Service (LOS) in the Project area; however, there are a number of freeway monitoring stations operating at a failing LOS. *Please refer to Section 3.6 of the Draft EIS/EIR for a more detailed discussion on ground transportation.*

CEQA Impacts

Under the CEQA baseline, the proposed Project is not expected to cause any significant traffic impacts from construction activities. However, the proposed Project would adversely impact one intersection based on comparison to the CEQA baseline. The Navy Way and Reeves Avenue intersection will be significantly impacted during AM and mid-day peak hours in 2020, 2025, and 2027. Therefore, the proposed Project would create a significant traffic impact under CEQA. Also, based on the 2027 train projections, there would not be significant delays of vehicular traffic at any impacted grade crossing.

NEPA Impacts

The proposed Project is not expected to cause any significant traffic impacts under NEPA from construction activities. However, the proposed Project would adversely impact one intersection based on comparison to the NEPA baseline. The Navy Way and Reeves Avenue intersection will be significantly impacted during AM and mid-day peak hours in 2020, 2025, and 2027. Therefore, the proposed Project would create a significant traffic impact under NEPA.

***Key* Definitions**

Level of Service = A grading system used to measure the average delay motorists experience at an interested, which is measured in seconds.

Mitigation Measure

The following mitigation would be implemented to mitigate the impacts associated with the proposed Project on Navy Way and Reeves Avenue intersection to a less than significant level:

- **MM TRANS-1:** ***Navy Way and Reeves Avenue***. Re-stripe the southbound (and eastbound approach to accommodate the southbound dual right-turns) to provide a right-turn lane, a shared through/right turn lane, and a through lane on the southbound approach.

This mitigation would only be constructed when the intersection operates at LOS E or worse. As such, the Port would monitor LOS after the project is completed. No mitigation is recommend until LOS E or F as LOS D or better is an acceptable traffic operating condition locally.

Key Community Issue: Economic Benefits

The economic contributions from the Port of Los Angeles to the regional and national economy are substantial. The Port creates tens of billions of dollars in industry sales each year in the southern California region. These sales translate into jobs, wages and salaries, and state and local taxes. The *Trade Impact Study* prepared for the Alameda Corridor Transportation Authority estimated that the Port supports, directly and indirectly, 1,100,997 full- and part-time jobs throughout California and 3,300,000 jobs nationwide.

Marine terminals generate a number of jobs such as: trucking, freight forwarders/customs house brokers, warehousing, steamship agents, chandlers, surveyors, etc. In 2006, the Port of Los Angeles supported 1,075,176 jobs in the State of California. Of these jobs, 43,398 jobs are directly generated by activities at the marine terminals. *Please refer to Chapter 7 of the Draft EIS/EIR for a more detailed discussion on socioeconomics.*

Changes to the Local Employment or Labor Force

As shown in Table 5, construction of the proposed Project would generate approximately 1,169 direct jobs and 1,601 secondary (i.e., indirect and induced) jobs over the two-year construction period. With the ramp-up and ramp-down and the completion of different tasks at different times, the construction workforce at any one time would vary. The construction workforce would primarily come from people already living in the Los Angeles Basin, given the large existing construction industry workforce and the highly integrated nature of the southern California economy, as well as the prevalence of cross-county and inter-community commuting by workers between their places of work and places of residence. Therefore, the proposed Project is not anticipated to result in either in-migration or relocation of construction employees to satisfy the need for increased temporary, construction-related employment.

***Key* Definitions**

- **Direct Jobs =** Jobs that would not exist if activity at Port were to stop.
- **Secondary jobs** = A combination of indirect and induced jobs:
  - **Indirect jobs** = Jobs created throughout the region as the result of purchases for goods and services by the firms directly impacted by the Port's cargo activity.
  - **Induced jobs =** Jobs created in the region by the purchases of goods and services by those individuals directly employed by the Port's cargo activity.

Table 5: Proposed Project – Direct and Secondary Construction Employment Over the Two-Year Construction Period

	Employment (Number of Jobs)
Direct	1,169
Secondary	1,601
Total	**3,370**

The proposed Project would generate permanent direct and secondary jobs. As shown in Table 6, the proposed Project is estimated to create 2,756 net permanent direct jobs attributable to operations in 2015, and increase to 3,885 direct jobs in 2027. Most of the direct jobs generated by operations at the terminal would be in the transportation and public utilities industrial sector of the regional economy. Secondary jobs, however, would occur in all industrial sectors. The proposed Project would provide new job opportunities to support the local economy; however, when compared to the overall regional economy, the proposed Project would not cause substantial change in the local employment or labor force. As with the construction jobs, given the large labor pool in the region, it is anticipated that the majority of new positions would be filled by people already living in the Los Angeles Basin. Consequently, no measurable change in population distribution would occur, and the proposed Project is not expected to change residential property trends or property values in the area.

Table 6. Proposed Project – Net Direct and Secondary Long Term Operations Employment

	Employment (Number of Jobs)				
	2012	**2015**	**2020**	**2025**	**2027**
Direct	-	2,756	3,226	3,697	3,885
Secondary	-	2,914	3,412	3,910	4,108
Total	**-**	**5,670**	**6,638**	**7,607**	**7,993**

Similarly, the proposed Project would result in an increase in wages, income, and state and local taxes, which would provide a benefit to local business and government agencies by increasing revues. However, as one component of large regional economy, it would not represent substantial change in revenue for local businesses or government.

Public Participation Guide

During the Draft EIS/EIR review phase, we urge you to take advantage of the many opportunities to participate.

Attend a Public Meeting	A public meeting on the Draft EIS/EIR will be held to provide input and learn more about the *APL Terminal Project*. Comments made at the public meeting will be addressed in the Final EIS/EIR. **Thursday, January 19, 2012** **6:00 p.m.** **Harbor Administration Building – Board Room** **425 S. Palos Verdes Street** **San Pedro, CA 90731**
Submit Comments via Mail	Comments sent by mail must be postmarked by February 17, 2012 and should be sent to both of the following address: Mr. Christopher Cannon Director of Environmental Management Los Angeles Harbor Department 425 S. Palos Verdes Street San Pedro, CA 90731 And U.S. Army Corps of Engineers, Los Angeles District Regulatory Division, Ventura Field Office ATTN: Theresa Stevens, Ph.D. 2151 Alessandro Drive, Suite 110 Ventura, California 93001
Submit Comments via E-mail	Comments sent by e-mail should be sent by **February 17, 2012** to: ceqacomments@portla.org and theresa.stevens@usace.army.mil · Send your comments in letter format as an attachment to the e-mail. · Include a mailing address in the comment letter. · Type "APL Terminal Project" in the e-mail subject line.
Visit our website	Project information provided by the Port of Los Angeles can be found at: www.portoflosangeles.org
Call with Questions	For questions on the *APL Terminal Project*, please contact the following: • U.S. Army Corps' Public Affairs Office at (213) 452-3920 • Port of Los Angeles, Jan Green Rebstock at (310) 732-3949