Mitigation Monitoring and Reporting Program

Berth 97-109 [China Shipping] Container Terminal Project

Environmental Impact Report (EIR)

Prepared By:

Environmental Management Division Port of Los Angeles

and

US Army Corps of Engineers Los Angeles District

With Assistance From:

CH2M Hill

Contact:
Environmental Management Division
Port of Los Angeles
310.732.3675

December 12, 2008

Contents

	Page
Mitigation Monitoring and Reporting Program	1-1
Introduction	1-1
Mitigation Monitoring and Reporting Program Implementation	
Mitigation Monitoring and Reporting	
Program Summary	2-1
oles	
2-1 Mitigation Monitoring and Reporting Program Summary	
11 63	2-1
	Introduction

Section 1 Mitigation Monitoring and Reporting Program

Introduction

Assembly Bill 3180 (AB 3180) codified in Section 21081.6 of the California Public Resources Code, became effective January 1, 1989, and requires a Lead or Responsible Agency to adopt a mitigation monitoring and reporting program (MMRP) when approving or carrying out a project. The purpose of this program is to ensure that when an environmental document, either an EIR or a negative declaration, identifies measures to reduce potential adverse environmental impacts to less-than-significant levels that those measures are implemented as detailed in the environmental document. As lead agency for the Berth 97-109 [China Shipping] Container Terminal Project, and pursuant to AB 3180, the Los Angeles Harbor Department (LAHD) is responsible for implementation of this MMRP.

An Environmental Impact Statement/Environmental Impact Report (EIS/EIR) has been prepared for the project that addresses the potential environmental impacts, and where appropriate, recommends measures to mitigate these impacts. As such, this MMRP is required to ensure that adopted mitigation measures are successfully implemented and a monitoring strategy was prepared for each mitigation measure identified in the Berth 97-109 [China Shipping] Container Terminal Project. Once the Board of Harbor Commissioners adopts the MMRP, the applicable LAHD division(s) will incorporate the mitigation monitoring/reporting requirements in the appropriate permits (i.e., engineering specifications, engineering construction permits, real estate entitlements, and/or coastal development permits). Therefore, in accordance with the aforementioned requirements, this document lists each mitigation measure, describes the methods for implementation and verification, and identifies the responsible party or parties as detailed below in the MMRP Implementation section.

Project Overview

Introduction and Project Overview

This section describes the proposed Project for the Berth 97-109 [China Shipping] Container Terminal Improvements Project EIR. The EIR analyzes the construction and operation of the proposed Project. The proposed Project includes three phases of terminal construction and development: Phase I, Phase II, and Phase III. Phase I construction, which included installing four A-frame cranes, wharf improvements, constructing bridge improvements, new backlands construction, and modifications to the entry gate, has been completed and terminal operations

officially began on June 21, 2004. The estimated completion dates of Phases II and III are 2011 and 2012, respectively.

The proposed Project would be designed to optimize container terminal operations in the Berth 97-109 area, along with a 40-year lease (2005 to 2045) to China Shipping Container Lines (China Shipping) to operate the terminal. LAHD will develop the terminal for the proposed tenant. This EIR reanalyzes Phase I construction and all operations between 2004 and 2007, in addition to all future construction and operations (2008 to 2045) consistent with the Amended Stipulated Judgment (ASJ) and federal Settlement Agreement (discussed below).

Major elements of the proposed Project development include: new wharf construction and lengthening at Berths 100 and 102, the addition of 10 shoreside A-frame cranes, the expansion and development of 142 acres of terminal backlands, the construction of container terminal buildings, gate facilities and accessory structures, the construction of two new bridges over the Southwest Slip to connect Berth 97-109 Container Terminal to Berth 121-131 Marine Terminal, and the construction of road improvements in the vicinity with minor dredging to match the West Basin channel depth of -53 feet. The proposed improvements are illustrated in Figure 2-3, and additional detail on the proposed Project is provided in Section 2.4.2. The proposed terminal is bounded by Harbor Boulevard, the Berth 121-131 (Yang Ming) Container Terminal, and the Los Angeles World Cruise Center terminal at Berths 90-93.

West Basin Transportation Improvements Program EIR Lawsuit and Stipulated Judgment

The Port previously prepared and certified the West Basin Transportation Improvements Program (WBTIP) EIR that assessed the proposed construction and operation of terminal and infrastructure improvements in the West Basin of the Port (LAHD, 1997). The document programmatically analyzed the impacts of the development of three separate container terminals in the West Basin: the China Shipping Terminal, the Yang Ming Terminal, and the TraPac Terminal.

In March 2001, the Port issued a permit approving not only the lease of Berths 97-109 (China Shipping Container Terminal) but also the construction based on the WBTIP EIR and the Channel Deepening EIR/EIS. In June 2001, opponents of the China Shipping Terminal project, as described in the WBTIP EIR, filed suit in both state and federal courts alleging that LAHD did not comply with, among other things, NEPA or CEQA in approving a permit to construct the China Shipping Terminal or to lease the terminal to the China Shipping Company. On October 30, 2002, the State of California Second District Court of Appeals ordered a partial halt to ongoing construction and operation of Phase I of the Berth 97-109 China Shipping Container Terminal project component (the proposed Project assessed in this document) of the WBTIP EIR. The court ordered the preparation of a project-specific EIR to evaluate all three phases of the proposed Project.

Afterward, LAHD and the litigants negotiated an agreement to settle both the state and the federal proceedings. On March 6, 2003, the Superior Court of the State of California, Los Angeles District, approved a Stipulated Judgment memorializing the Settlement Agreement between the Project opponents and LAHD to settle the state case. On that same date, the United States District Court for the Central District of California approved a stipulation for compromise settlement among the Project opponents, USACE, and LAHD. Subsequently, the Port negotiated with the litigants to amend the Stipulated Judgment. A compromise in the form of an ASJ was reached in March 2004 (see Appendix B). This Recirculated Draft EIS/EIR has been prepared pursuant to the terms of the ASJ and the obligations of the Port under CEQA.

Although the China Shipping Container Terminal and Yang Ming Container Terminal share one gate complex, both the federal Settlement Agreement and the state court ASJ require the preparation of a project-specific environmental analysis of all three phases of the proposed Project alone, not as part of any larger West Basin project or other project. The federal Settlement Agreement also provided that the revised Environmental Assessment (EA) and permit prepared by USACE would remain in place until USACE reconsiders the permit terms and conditions upon completion of the EIS/EIR.

The ASJ, in consideration of additional mitigation measures and other requirements, allowed the Port to complete construction and commence operation of Phase I of the China Shipping Project. Specifically, Phase I China Shipping operations are operational while the Project-specific China Shipping EIR is under preparation. Phase I China Shipping construction was completed in 2003, and operations officially began on June 21, 2004.

Project Objectives

Los Angeles Harbor Department operates the Port under legal mandates under the Port of Los Angeles Tidelands Trust (Los Angeles City Charter, Article VI, Sec. 601) and the Coastal Act (PRC Div 20 Section 30700 *et seq.*), which identify the Port and its facilities as a primary economic/coastal resource of the state and an essential element of the national maritime industry for promotion of commerce, navigation, fisheries and harbor operations. According to the Tidelands Trust, Portrelated activities should be water dependent and should give highest priority to navigation and shipping, as well as provide necessary support and access facilities for accommodating the demands of foreign and domestic waterborne commerce.

The overall purpose of the proposed Project is to expand and maximize the cargo-handling efficiency and capacity of the Port at Berths 97-109 to address the need to optimize Port lands and terminals for current and future containerized cargo handling. This purpose would be accomplished through the construction of a marine terminal of approximately 142 acres that would accommodate an annual throughput of up to 1.5 million TEUs.

The LAHD's overall objective for the proposed Project is threefold: (1) provide a portion of the facilities needed to accommodate the projected growth in the volume of containerized cargo through the Port; (2) comply with the Mayor's goal for the Port to increase growth while mitigating the impacts of that growth on the local communities and the Los Angeles region by implementing pollution control measures, including the elements of the Clean Air Action Plan (CAAP) applicable to the proposed Project; and (3) comply with the Port Strategic Plan to maximize the efficiency and capacity of terminals while raising environmental standards through application of all feasible mitigation measures.

Although these interrelated goals require increases in the cargo-handling efficiency and capacity of existing terminal facilities in the Port where feasible, the goals also reflect the need for the development of new container terminals in the Port complex to accommodate future cargo demands. To accomplish these basic objectives in a manner consistent with LAHD public trust responsibilities, the following supporting objectives need to be accomplished:

Establish and expand a new container facility in the West Basin to the extent required to:

a) Optimize the use of existing land and waterways and be consistent with the overall use of allowable uses under the Port Master Plan

- b) Accommodate foreseeable containerized cargo volumes through the Port
- c) Increase container handling efficiency and create sufficient backland area for container terminal operations, including storage, transport, and on/offloading of container ships in a safe and efficient manner
- d) Improve or construct container ship berthing and infrastructure capacity where necessary to accommodate projected containerized cargo volumes through the Port
- e) Provide access to land-based rail and truck infrastructure locations capable of minimizing surface transportation congestion or delays while promoting conveyance to local and distant cargo destinations
- f) Provide needed container terminal accessory buildings and structures to support containerized cargo-handling requirements

Existing Conditions

Regional Context

The Port consists of 28 miles of waterfront, approximately 300 commercial berths, and 7,500 acres of land and water. The Port is administered under the California Tidelands Trust Act of 1911 by the LAHD. The LAHD is chartered to develop and operate the Port to benefit maritime uses, and it functions as a landlord by leasing Port properties to more than 300 tenants. The Port contains 27 major cargo terminals, including facilities to handle automobiles, containers, dry bulk products, liquid bulk products and cruise ships as well as extensive transportation infrastructure for cargo movement by truck and rail. The Port accommodates commercial fishing, canneries, shipyards, and boat repair yards; provides slips for 6,000 pleasure craft, sport fishing boats, and charter vessels; and supports community and educational facilities such as a public swimming beach, the Boy/Girl Scout Camp, the Cabrillo Marine Aquarium, and the Maritime Museum.

Project Site

As shown in Figure 2-1, the Berth 97-109 Container Terminal (proposed Project) is located adjacent to the San Pedro District of the Port. It is bordered by the Southwest Slip on the north; John S. Gibson Boulevard and Pacific Avenue on the west; Knoll Hill, Front Street, and the Vincent Thomas Bridge on the south; and the West Basin Channel on the east. Adjacent and north of the Southwest Slip is the Yang Ming Terminal (Berths 121-131). Located immediately to the south are the Los Angeles World Cruise Center, Lane Victory, and the Catalina Express ferry terminal.

Existing equipment and facilities, developed as part of Phase I, on the proposed Project site include four A-frame cranes along the wharf, paved backlands used for container storage, mobile equipment used to handle containers, and wharves (at Berth 100). Prior to construction, the site was largely undeveloped backlands. Surrounding land uses include the community of San Pedro to the west of the terminal, and heavy port industries to the north, south, and east. Wilmington not only is a predominantly residential community but also contains community and commercial uses.

Proposed Project

The proposed Project (consists of the development and operation of a new container terminal for the China Shipping Lines at Berths 97-109. The terminal would be developed by LAHD in three phases of construction, Phase I (completed and in operation since 2004), Phase II (estimated completion in 2011), and Phase III (estimated completion in 2012). The terminal would operate over a 40-year lease (2005 to 2045). China Shipping is operating under an existing lease, which will be reconsidered as part of the proposed Project. Phase I elements in operation are consistent with the ASJ and the federal Settlement Agreement.

Phase I elements and existing operation (2004 to 2007) are being reanalyzed in conjunction with future construction and operation (2008 to 2045) as part of this environmental analysis. The proposed Project would operate at maximum capacity by 2030. Figure 2-2 presents a plan view of the existing conditions at the proposed Project site, while Figure 2-3 provides a representative sketch of the proposed Project at full buildout and maximum capacity (2030).

As part of the proposed Project, China Shipping would be granted a 40-year lease, beginning in 2005 and ending in 2045, to occupy and operate the terminal. As part of the lease, West Basin Container Terminal LLC (WBCT), a subsidiary of China Shipping Lines, would operate the terminal backlands. The lease would require that the premises be used for activities, operations, and purposes incidental to and related to the operation of a container terminal. Specifically, the lease would prohibit the tenant from any use of the premises other than those stated above without prior approval of the Port. Within the terms of the ASJ, China Shipping currently operates the terminal under a lease signed in 2005. Consistent with the ASJ, the existing lease would be modified upon certification of this EIS/EIR to require compliance with all laws and regulations, including environmental controls that are not part of the current lease. These additional environmental controls would be imposed pursuant to this EIS/EIR, the CAAP, the Port Environmental Policy, and the Port Real Estate Leasing Policy (POLA, 2007), as discussed in Section 1.6. Measures would include emissions standards for terminal equipment, participation in the vessel speed reduction program, fuel requirements, Alternative Maritime Power (AMP) for a proportion of marine vessels, clean truck requirements, and other environmental measures unrelated to air quality (such as stormwater management). WBCT would operate under the China Shipping lease as described above.

When operating at maximum capacity in 2030, the improved Berth 97-109 Container Terminal could handle approximately 1,551,000 TEUs per year, which represents an annual throughput of approximately 838,378 containers. To accommodate an annual throughput of 1,551,000 TEUs, 234 annual ship calls and associated tugboat operations (2 tugs are required each for ship docking and undocking, for a total of 4 tugs per call or 936 tugs annually), a total of up to 5,055 daily truck trips, and up to 817 annual round-trip rail movements would be required. As discussed in Section 1.1.3, these throughput numbers were determined using two forecasting models and represent the reasonably foreseeable upper limit of terminal operations. The models consider the capacities of the berth and wharf, along with cargo and vessel forecasts contained in the report Forecast of Container Vessel Specifications and Port Calls within San Pedro Bay (Mercator Transport Group, 2005). China Shipping might operate at lower TEU volumes than those described; however, an estimation of reasonably foreseeable throughput based on berth limitations ensures a conservative analysis in that all reasonably foreseeable Project operations are included. Additionally, ships not belonging to China Shipping (third-party invitees) occasionally might use the terminal. By estimating reasonably foreseeable throughput based on berth limitations, the potential for such third-party ship calls is considered. Table 1 presents the anticipated throughput for the proposed Project.

Table 1: Throughput

	CEQA	Proposed Project			
	Baseline a	2005	2015	2030*	2045*
Terminal Acreage	11	72	142	142	142
TEUs per Acre	4,103	5,600	8,200	10,922	10,922
Total Annual TEUs	45,135	403,200	1,164,400	1,551,000	1,551,000
Annual Ship Calls	0	52	182	234	234
Daily Truck Movements (Peak)	0	1,529	4,364	5,055	5,055
Annual Truck Trips**	0	417,702	1,192,185	1,508,004	1,508,004
Annual Rail Movements ^c	0	224	648	817	817
% TEUs by Truck ^d	0	80.5	79.7	83.1	83.1
% TEUs to Near Dock Rail	N/A***	19.1	18.3	19.6	19.6
% TEUs by On-Dock Rail	0	19.5	20.3	16.9	16.9
Number of Cranes	0	4	10	10	10
Estimated Number of Employees (direct, indirect, and induced) ^e	0	72	85	112	112

Construction

New Wharves

Upon completion of the proposed Project construction, the wharves at Berth 100 and Berth 102 would total approximately 2,500 feet. When completed, the Berth 100 and 102 wharves would include the existing 1,200-foot wharf at Berth 100 and 925 feet of new wharf at Berth 102, and the southern extension of Berth 100 (375 feet). The wharves are designed to accommodate the largest ships in the projected transpacific fleet that would each carry up to 10,000 TEUs. All wharves would be AMP capable, thus allowing ships to "plug in" to shoreside electrical power while at dock instead of using on-board diesel-powered generators. The existing 1,200-foot wharf at Berth 100 was completed as part of Phase I construction and involved the placement of 88,000 cubic yards (yd³) of rock; 14,000 yd³ of clean backfill material; and a 652 separate 24-inch-diameter octagonal concrete wharf piles. This section of wharf was completed in 2003 and officially began operation on June 21, 2004, in accordance with the terms of the ASJ.

Of the 1,300 feet of new wharf, approximately 925 feet would be constructed at Berth 102 on a previously approved dike that was built as part of the approved Channel Deepening Project. The new wharf at Berth 102 would extend northward from the existing Berth 100 wharf. New wharf would also be constructed to extend Berth 100 an additional approximately 375 feet south into the Catalina Express Terminal. Only the Berth 100 southern wharf extension (approximately 375 feet) would require new rock dike (116,000 yd³) and fill (24,000 yd³). The fill would be obtained from surplus clean fill located onsite (deposited and analyzed as part of the Channel Deepening Project). Wharf construction would include pile driving.

Under the proposed Project, a total of 10 new A-frame cranes¹ would be installed on the wharves at Berths 100 and 102. A-frame cranes have fixed towers that are approximately 240 feet high. When stowed (at a 45-degree angle), the articulated booms on these cranes normally extend to a height of about 280 feet and, for maintenance, are capable of being extended up to 360 feet in the vertical position.

Four A-frame cranes were installed during Phase I construction and are currently located at the Berth 100 wharf. Six additional A-frame cranes would be installed subsequently, one as part of the Berth 100 south wharf extension and five at the new Berth 102 wharf. The aesthetic and visual impacts of these cranes and potential mitigation measures are analyzed in Chapter 3.1 in accordance with the requirements of CEOA. The ASJ requires that two low-profile cranes² or, potentially, more low-profile cranes, be used at Berth 102 as mitigation if the wharf is constructed and if the lowprofile cranes are not determined to be "infeasible" under the terms of the ASJ. However, a determination by the Port that low-profile cranes are infeasible under the terms of the ASJ was upheld in an arbitration proceeding under the ASJ ("The Arbitration in the Matter of Los Angeles Superior Court Case No. BS 070017: Natural Resources Defense Council et al. v. City of Los Angeles," JAMS Case No. 1220036904 [November 26, 2007].) Additionally, and independent of the arbitrator's decision under the ASJ, low-profile cranes have been determined under CEOA and NEPA to be infeasible and ineffective as mitigation for aesthetic and visual resources impacts of the proposed Project, as discussed in Section 3.1 of this Recirculated Draft EIS/EIR. Therefore, the use of lowprofile cranes is not evaluated as a mitigation measure in this Recirculated Draft EIS/EIR. This Recirculated Draft EIS/EIR assumes that under the proposed Project, all of the 10 new cranes would be standard A-frame cranes. The 10 A-frame cranes would be used as needed along the entire 2,500foot wharfage, although the fixed length (estimated at 1,200 feet) of the power cable of each crane imposes a limit on how far up and down the wharf each crane can travel.

The ASJ requires that AMP be implemented at the China Shipping Terminal to reduce diesel emissions while the ships are hoteled. AMP is the technique of utilizing shoreside electrical power from the power grid of the City to operate the container ships when they are berthed at an appropriately equipped wharf. Plugging into shoreside power allows the emissions from auxiliary diesel engines/electrical generators of the ships to be replaced with emissions generated outside the Port area at cleaner-burning power plants. Initially, the shoreside electrical power would be transmitted to the berthed ship by large electrical cables that would extend from the wharf to barge-mounted transformers, which would be connected to the container ship. Eventually, the transformer would be located on the ships, and the ships would plug in directly to the wharf. The transformers convert the shoreside power to a usable voltage for ship operations. The location of the transformer does not affect operation; it represents Port and the shipping lines changing preferences as the use of AMP has developed.

Dredging

The construction of sections of new wharves at Berth 100 required clamshell dredging to remove approximately 41,000 yd³ of sediments, with that material disposed of at the Port's Anchorage Road soil storage site. The dredging that occurred along the wharf at Berth 100 as a part of Phase I

¹A-frame cranes are the standard cranes used throughout the Port for loading and unloading containers to and from ships. The A-frame cranes have booms that move up and down to gain access to different locations on the container ships.

² Low-profile cranes use a boom that moves horizontally, rather than up or down, to access different areas of the container ships. Because of this, they have a lower profile (total height of 185 feet or less) than A-frame cranes at rest (approximately 280 feet).

construction of the proposed Project matched the main channel depth of -53 feet, including an additional -2-foot overage to allow for normal construction tolerances. Major dredging is not necessary for Berth 102 because dredging was conducted previously in this area as part of the approved Channel Deepening Project as addressed in its Supplemental EIS/EIR (USACE and LAHD, 2000), and Port Master Plan Amendment No. 21 (USACE and LAHD, 2002). However, some minor maintenance dredging might be needed to remove sediments near Berth 102 that have settled since the Channel Deepening Project dredging, and this material would also be disposed of at the Anchorage Road soil storage site. The area of Berth 102, dredged to the -53-foot channel depth as part of the Channel Deepening Project, would be developed as a container ship wharf (Berth 102) in Phase II construction of the proposed Project.

On the basis of previous sampling and analyses, the USACE and USEPA determined that a portion of the dredge material in Phase I was unsuitable for unconfined ocean disposal. The dredge material was placed in the approved upland disposal site at Anchorage Road.

Backlands Development and Buildings

The proposed Project at full buildout (2012) would allow for the operation of approximately 142 acres of backlands. The container terminal lease would cover 142 acres. Phase I construction developed 72 acres as container backlands. Phase II construction would develop an additional 45 acres of backlands on existing fill that the Channel Deepening Project created prior to 2001. Phase III construction would develop an additional 25 acres of backlands on existing adjacent land, which would include conversion of the existing Catalina Express facilities³ into backlands.

Development of the backlands would include construction of a three-story 12,000-ft² marine operation building, a one-story 3,200-ft² (plus 2,900 ft² of canopy) crane maintenance building (both buildings would be located behind Berth 102), new gate and entrance facilities, chassis racks, a compressed air system, lighting, fire hydrants, and other infrastructure and equipment necessary to ensure the safe and efficient movement of cargo. Both buildings will meet Leadership in Energy and Environmental Design (LEED) standards and are expected to meet, at minimum, LEED silver certification. Figure 2-3 shows the general location of the buildings and gate structures. The terminal lighting, chassis racks, and fire hydrants would be distributed around the backlands. These additional backland improvements would require construction activities such as grading, drainage, paving, striping, lighting, fencing, and the addition of utility facilities and equipment.

Improvements to John S. Gibson Boulevard Entrance

The proposed Project includes traffic control modifications and reconfiguration of roadway geometrics at the existing shared entrance of the Berth 97-109 and Berth 121-131 terminals along John S. Gibson Boulevard to improve the flow of truck traffic. These modifications were completed as part of Phase I construction and operations. These improvements occurred within the terminals, outside the public right-of-way. Onsite improvements at the entrance gate included geometric lane upgrades to allow for better container truck queuing and modification of entrance/exit gates to allow for technological improvements in gate operations. Other gate features such as a new scale and additional lighting were included.

³The Catalina Express terminal would be relocated to Berth 95 as part of the proposed Project. The operation may be moved again as part of the San Pedro Waterfront Project, in which case it would be evaluated in the environmental document prepared for that project.

Bridges from Berth 97-109 Container Terminal to Berth 121-131 Terminal

Two bridges would be constructed across the Southwest Slip as part of the proposed Project to facilitate additional cargo movement between the Berth 97-109 Container Terminal and the Berth 121-131 terminal. As previously discussed, the China Shipping and Yang Ming terminals share one gate complex. The ASJ associated with the proposed Project requires an evaluation of all Project-specific and cumulative impacts from the Berth 97-109 Container Terminal Project alone, not as part of any larger West Basin or other project. The analysis in this Project-level Recirculated Draft EIS/EIR used a combination of two capacity models. The first model analyzes backland capacity while the second model analyzes berth capacity. The latter model is used to determine the ultimate throughput capacity of Berth 97-109 operations to ensure all TEUs transferred through the Berth 97-109 wharf and stored at Berth 97-109 terminal were captured in the throughput analysis. All mitigation measures are terminal-specific and would be applied to all ship and backland operations.

One bridge was constructed under Phase I, and the second bridge would be constructed during Phase II. The Phase I bridge is approximately 130 feet long and 63 feet wide. The Phase II bridge would be approximately 143 feet long and 63 feet wide. Both bridges would be supported by abutments at each end so that no fill would be discharged into waters of the U.S. The spans of the bridges would be precast girders, and the decks would be cast in place concrete.

Inbound containers (unloaded at the proposed Project) destined for delivery by rail would be hauled over the bridges to the existing on-dock rail yard at the Yang Ming Terminal (Berths 121-131). Similarly, outbound containers destined for the proposed Project would be unloaded at the same on-dock rail facility and transferred to the backlands at the proposed China Shipping Terminal. Both of these container transfers would use the two proposed bridges across the Southwest Slip. These bridges would enable trucks to gain access to both terminals and, thereby, to minimize truck traffic on Front Street and John S. Gibson Boulevard.

Catalina Express Terminal Relocation

As part of the Berth 100 wharf extension, Catalina Express Terminal operations would be relocated from Berth 96 to the south of the Vincent Thomas Bridge at Berth 95. The existing Catalina Express floating docks would be relocated southerly toward the Lane Victory. Passenger loading of the Catalina Express would occur from the relocated floating dock located between Lane Victory and the bridge. Up to three new floating docks will be provided near Berth 95. These floating docks would accommodate two vessels at a time, along with Catalina Express vessels not in use. Existing parking facilities at Berth 95 would be used. Operations at the Catalina Terminal would be housed in the existing Pavilion Building. The existing Princess Pavilion would be remodeled and the administrative functions of the Catalina Express Terminal would be relocated to the remodeled building. Following this, the existing Catalina Express Terminal building would be demolished.

In-water upgrades near Berth 95 would be minor and would include installing new floating docks, requiring a federal permit. Several piles and minor dike or fill placement may be required to anchor the docks. Catalina Terminal operates four to six vessels ranging from 95 to 145 feet; the terminal runs four daily trips to Catalina and nine trips on Saturday and Sunday.

Terminal Operations

The completed Berth 97-109 Container Terminal would have a maximum annual throughput capacity of approximately 1,551,000 TEUs (838,338 containers) reached by 2030 (Table 2-1). By 2030, terminal operations are expected to occur 350 days per year, in three 8-hour shifts per day, 7 days per week, and to directly employ approximately 112 workers during the day and up to 70 at night. While the terminal is expected to operate 24 hours a day, actual work time will be less than 24 hours to accommodate employee breaks and slow-downs during shift changes. It is assumed that two vessels would be berthed at any one time, and approximately 234 vessel calls per year are expected by 2030.

Marine Terminal Operations. The operation of container vessels, their loading and unloading, and the handling of containers in the terminal are described in Section 1.1.2. A total of three vessels could be berthed at the terminal at any one time, but the more usual case would be two vessels at berth. While three vessels could fit at the berth, this scenario would happen only in extreme cases (for example, if a ship were delayed in crossing due to weather or mechanics) due to crane limitations and vessel schedules. By design, shipping companies deploy vessel strings that are spread to avoid berth overlaps. This allows the ship to be turned faster while in port because the maximum amount of cranes and gangs can be dedicated to the ship. With 10 cranes, the optimal condition at Berths 97-109 is to have two ships with 5 cranes per ship. At maximum berth capacity, the terminal would experience approximately 234 vessel calls per year by 2030.

A proportion of the vessels calling at the Berth 97-109 terminal would use AMP while at berth to be consistent with the ASJ. That requirement would be phased in over time as described in Section 2.4.2.1. AMP allows vessels to turn off their diesel auxiliary generators and support hoteling needs with shoreside electrical power.

Truck Operations. Based on models derived from the Port's Baseline Transportation Study and Rail Study, by 2030, when the throughput of the terminal is expected to reach maximum capacity, the Berth 97-109 terminal would generate approximately 5,055 daily truck trips (Table 2-1). Those trips would include local cargo (principally from Southern California but including northern California, Arizona, Nevada, and Utah), national cargo hauled entirely by truck, and intermodal cargo bound for or coming from locations farther east. In 2030, it is assumed that 83.1 percent of containers (or approximately 1.3 million TEUs) are moved by trucks (including being trucked to near and off-dock rail yards). Of the approximately 1.3 million TEUs, approximately 303,996 TEUs are intermodal cargo trucked to nearby dock rail yards.

The intermodal component would consist of containers that could not be accommodated by the on-dock rail yard located at the adjacent Berth 121-131 (Yang Ming) terminal. Because all the containers on a train that is assembled in the on-dock rail yards are bound for the same destination, containers bound for other locations are hauled to nearby dock facilities to be grouped with containers from other terminals bound for the same destination. Trucks would haul those containers on public highways to and from offsite rail yards, including the Union Pacific Carson ICTF, the Burlington Northern Santa Fe Hobart Yard in Vernon, and the Union Pacific East Los Angeles Yard. Nonintermodal cargo, both local and national, would be hauled to and from the terminal gates by trucks.

As rail use increases over time, the proportion of cargo hauled by truck would change, but terminal planners estimate that in 2030, and thereafter, approximately 83.1 percent of the cargo (5,055 truck trips per day and 1,508,004 annual truck trips) would move by truck at least as far as an offsite rail yard. For this analysis, the split is assumed to be 19.6 percent truck trips to near-dock rail, 50 percent

local deliveries, and 13.5 percent deliveries outside the South Coast Air Basin (destined to the national market) in 2030.

Rail Operations. The on-dock rail yard at the adjacent Berth 121-131 (Yang Ming) terminal would handle cargo from the Berth 97-109 terminal. According to the Port Rail Master Plan and the Ground Transportation analysis done for the proposed Project, the rail yard could handle approximately 462,500 TEUs annually. It is assumed that China Shipping would use 50 percent of the on-dock capacity or 231,250 TEUs annually, which represents approximately 15 percent of the projected 2030 throughput of 1.5 million TEUs per year.

Containers would be hauled by yard tractors between the vessel berths and the Berth 121-131 rail yard via bridges connecting the two terminals. At the rail yard, containers would be lifted on and off railcars by mobile cranes or rubber-tired gantry (RTG) cranes. The rail yard would operate 24 hours per day, 350 days per year, and could accommodate two double-stack unit trains each day. Although each train in each direction could carry a maximum of 250 containers that are 40 feet long, the trains usually carry fewer than that due to weight considerations. A more realistic estimate is that each inbound train trip (into the Port) transports an average of 150 containers (278 TEUs) plus empty railcars, while each outbound train trip (to inland locations) transports an average of 225 containers (416 TEUs), for an average of 375 containers (694 TEUs) per round trip (Yang Ming, 2003).

Rail operations at on-dock rail yards involve a number of entities. The terminal operator moves containers to and from the on-dock facility. Containers are off-loaded and loaded directly from and onto trains. Railcars are then coupled with other cars traveling to the same destination. The coupled railcars are called a unit train. Unit trains vary in length between 105 and 140 railcars, with each railcar carrying two 40-foot containers. These unit trains are usually built by Pacific Harbor Line (PHL). PHL is a third-party, independent rail company that provides rail transportation, yard switching, maintenance and dispatching services to the San Pedro Bay Ports. PHL manages all rail dispatching and switching functions at the on-dock rail yards at the two ports, including:

- Scheduling and overseeing all train movements
- Organizing railroad cars carrying containers of imported goods and switching them onto various tracks to form unit trains
- Breaking down unit trains arriving at the ports, switching railroad cars onto various tracks and distributing them to nine marine terminals where containers are loaded onto ships for export

The Port is served by two Class 1 railroads, Burlington Northern Santa Fe (BNSF) and Union Pacific (UP), often referred to as the 'main line' or 'line-haul' rail companies. After PHL has built a unit train, BNSF or UP will hook up their line-haul locomotive(s) to the train and pull the train out of the on-dock rail yard on to the main-line tracks to the eventual destination. PHL locomotives will occasionally pull portions of a unit train out of the on-dock facility to one of the near dock ICTFs. A loaded double-stack train is typically pulled by three or four line-haul locomotives, although, if PHL pulls the train, it would be hauled by two or three smaller locomotives.

PHL contracts with the Ports of Los Angeles and Long Beach to operate the rail traffic control system. Agreements with BNSF and UP for international cargo are usually handled by the shipping lines. Many shipping lines have a contract with both BNSF and UP.

Relationship to Existing Plans

A primary objective of the planning process for the Project is to ensure that the criteria and guidelines of relevant and officially adopted plans and policies are defined and met. The following discussion addresses the relationship of the Project with these officially adopted plans.

Table 2. Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

Applicable Ruling Description

California Coastal Act of 1976

The Coastal Act (PRC Div. 20 Section 30700 *et seq.*) identifies the Port of Los Angeles and its facilities as a "primary economic and coastal resources of the state, and an essential element of the national maritime industry (PRC Section 30701). The Port is responsible for modernizing and constructing necessary facilities to accommodate deep-draft vessels along with the demands of foreign and domestic waterborne commerce as well as other traditional and water-dependent and related facilities to preclude the necessity for developing new ports elsewhere in the state (Sections 30007.5 and 30701 [b]). The Act also establishes that the highest priority for any water or land area use within the jurisdiction of the Port of Los Angeles shall be for developments that are completely dependent on such harbor water areas and/or harbor land areas for their operations (Sections 30001.5 [d], 30255 and 31260). The Coastal Act further provides that the Port should "Give highest priority to the use of existing land space within harbors for port purposes, including, but not limited to, navigational facilities, shipping industries, and necessary support and access facilities." (Section 30708 [c]).

Under the California Coastal Act, water areas may be diked, filled, or dredged when consistent with a certified port master plan only for specific purposes, including: (1) construction, deepening, widening, lengthening, or maintenance of ship channel approaches, ship channels, turning basins, berthing areas, and facilities that are required for the safety and the accommodation of commerce and vessels to be served by port facilities; and (2) new or expanded facilities or waterfront land for Port-related facilities.

In accordance with provisions of the Coastal Act, the Port has a certified Master Plan that provides the Port with Coastal Development Permit authority for actions/developments consistent with that Master Plan. Items that are inconsistent with the Master Plan such as new fills in water would require a Master Plan Amendment through the Coastal Commission. The proposed Project is consistent with general provisions of the Plan, but implementation of the proposed Project will require an amendment of the Port of Los Angeles Master Plan (see below) because the 1.2-acre fill is not described in the current version of the Plan and because a minor redesignation of land use is required for 8 acres of existing fill.

Coastal Zone Management Act (CZMA) Section 307 of the Coastal Zone Management Act (CZMA) requires that all federal agencies with activities directly affecting the coastal zone, or with development projects within that zone, comply with the state coastal acts (in this case, the California Coastal Act of 1976) to ensure that those activities or projects are consistent, to the maximum extent practicable. The California Coastal Commission will use this Recirculated Draft EIS/EIR when considering whether to find the proposed Project consistent with the Coastal Act, and the USACE will use that approval as a demonstration that the proposed Project is in compliance with the CZMA.

Table 2. Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

Applicable Ruling	Description
Port of Los Angeles Port Master Plan	The Port of Los Angeles Master Plan (PMP) (POLA, 1979) provides for the development, expansion, and alteration of the Port (both short-term and long-term) for commerce, navigation, fisheries, Port-dependent activities, and general public recreation. Those objectives are consistent with the provisions of the California Coastal Act (1976), the Charter of the City of Los Angeles, and applicable federal, state, and municipal laws and regulations. The proposed action will necessitate an amendment of the Port of Los Angeles Port Master Plan to change the use of 8 acres of land on the Project site from "other" to "cargo." Other amendments might be necessary to change or add uses, or for the placement of additional fill.
California Coastal Plan	Under provisions of the California Coastal Act, the Port of Los Angeles Master Plan is incorporated into the Local Coastal Program of the City of Los Angeles. The LAHD has coastal development permit authority for activities in the Main Channel. Therefore, if the proposed Project would be consistent with the Port of Los Angeles Master Plan, the proposed Project would also be considered consistent with the Local Coastal Program. The LAHD does not currently have coastal development permit authority for the following proposed Project element: filling-in of 2.5 acres in a waterway for container terminal purposes, or redesignating 8 acres of land uses from general cargo to container uses. Authority would be granted if the Port of Los Angeles Master Plan were amended to include the Project element.
California Tidelands Trust Act, 1911	Submerged lands and tidelands within the Port of Los Angeles, which are under the Common Law Public Trust, were legislatively granted to the City of Los Angeles pursuant to Chapter 656, Statutes of 1911 as amended. Those properties are held in trust by the City and administered by the LAHD to promote and develop commerce, navigation and fisheries, and other uses of statewide interest and benefit, including but not limited to, commercial, industrial, and transportation uses, public buildings and public recreational facilities, wildlife habitat, and open space. The LAHD would fund the proposed Project with trust revenues. All property and improvements included in the proposed Project would be dedicated to maritime-related uses and would, therefore, be consistent with the Trust. Although under the Tidelands Trust Act, the Port can have nonshipping uses, the Port has given container operations priority for the Berth 97-109 area.
San Pedro Bay Clean Air Action Plan	The Port, in conjunction with the Port of Long Beach and with guidance from AQMD, CARB, and USEPA, has developed the San Pedro Bay Clean Air Action Plan (CAAP), which was approved by the Los Angeles and Long Beach Boards of Harbor Commissioners on November 20, 2006. The CAAP focuses on reducing diesel particulate matter (DPM), NO _X , and SO _X , with two main goals: (1) to reduce Portrelated air emissions in the interest of public health, and (2) to disconnect cargo growth from emissions increases. The Plan includes near-term measures implemented largely through the CEQA/NEPA process and new leases at both ports. The proposed Project includes air quality control measures outlined in the CAAP, both as mitigation that will be imposed via permits and lease provisions and as standard measures that will be implemented through the lease, agreements with other agencies and business entities, and Port contracting policies.
Port of Los Angeles Real Estate Leasing Policy	The purpose of this Policy is to provide a framework that governs leasing and rental decisions as they relate to tenant retention, selecting new tenants, development of new agreements and, as appropriate, modifications to existing agreements by amendments. The proposed Project would be consistent with the Leasing Policy in that it would incorporate CAAP provisions that would be implemented through the lease with the terminal operator.

Table 2. Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

Applicable Ruling	Description
Port of Los Angeles Strategic Plan	The Port of Los Angeles Strategic Plan (USACE and POLA, 2007) identifies the mission of the Port and provides 11 strategic objectives for the next 5 years. The mission includes promotion of "grow green" philosophy combined with fiduciary responsibility and promotion of global trade. The 11 strategic objectives include, minimization of land use conflicts, maximizing the efficiency and the capacity of current and future facilities, addressing needed infrastructure requirements, maintaining financial self-sufficiency, raising environment standards and enhancing public health, promoting emerging and environmentally friendly cargo movement technology and energy sources, provide for safe and efficient operations and homeland security, strengthen local community relations and developing more and higher quality jobs. The proposed Project is consistent with the Strategic Plan because the Project would help to maximize the efficiency and capacity of a port terminal and would raise environmental standards through the incorporation of Port environmental policies into a new lease.
Port of Los Angeles Risk Management Plan	The Risk Management Plan, an amendment to the Port of Los Angeles Master Plan, was adopted in 1983, per requirements of the California Coastal Commission. The purpose of the Risk Management Plan is to provide siting criteria relative to vulnerable resources and the handling and storage of potentially hazardous cargo such as crude oil, petroleum products, and chemicals. The Risk Management Plan provides guidance for future development of the Port to minimize or eliminate the hazards to vulnerable resources from accidental releases (LAHD, 1983). The proposed Project design is consistent with the Risk Management Plan.
City of Los Angeles General Plan – Port of Los Angeles Plan	The Port of Los Angeles Plan is part of the General Plan for the City of Los Angeles (City of Los Angeles, 1982a). This plan provides a 20-year official guide to the continued development and operation of the Port. It is designed to be consistent with the Port of Los Angeles Master Plan discussed above. Because the proposed Project would be consistent with the Port of Los Angeles Master Plan following the amendment, it would also be consistent with the goals of the General Plan.
City of Los Angeles – San Pedro Community Plan	The San Pedro Community Plan (City of Los Angeles, 1982b) serves as a basis for future development of the community. It is also the land use plan portion of the City's Local Coastal Program for San Pedro. The Port of Los Angeles, although contiguous to San Pedro, is not part of the San Pedro Community Plan area. However, the San Pedro Community Plan does make recommendations regarding the Port, particularly for areas adjacent to commercial and residential areas of San Pedro. Although the proposed Project site is not contiguous with San Pedro, the proposed Project would be consistent with these recommendations as the Port has taken into consideration the residential and commercial communities of San Pedro during project development through the scoping process.
City of Los Angeles General Plan – Air Quality Element	The City of Los Angeles General Plan has an Air Quality Element (City of Los Angeles, 1992) that contains general goals, objectives, and policies related to improving air quality in the region. Policy 5.1.1 relates directly to the Port and requires improvements in harbor operations and facilities to reduce emissions. The LAHD is actively planning for and implementing such improvements. The proposed Project is consistent with the Air Quality Element in that it incorporates CAAP

measures to reduce air quality impacts.

Table 2. Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

Applicable Ruling Description Water Quality Control The Water Quality Control Plan for the Los Angeles River Basin (Region 4) (Basin Plan - Los Angeles Plan) was adopted by the Regional Water Quality Control Board, Los Angeles River Basin Region (RWQCB) in 1978 and updated in 1994 (RWQCB, 1994). The Basin Plan designates beneficial uses of the basin's water resources. The Basin Plan describes water quality objectives, implementation plans, and surveillance programs to protect or restore designated beneficial uses. The proposed Project would be operated in conformance with objectives of the Water Quality Control Plan because it would be required by the lease to comply with the General Industrial permit for stormwater. Water Quality Control In 1974, the State Water Resources Control Board (SWRCB) adopted a water quality Policy - Enclosed Bays control policy that provides principles and guidelines to prevent degradation and to and Estuaries of protect the beneficial uses of waters of enclosed bays and estuaries (SWRCB, 1974). Los Angeles Harbor is considered to be an enclosed bay under this policy. Activities, California such as the discharge of effluent, thermal wastes, radiological waste, dredge materials, and other materials that adversely affect beneficial uses of the bay and estuarine waters are addressed. Waste discharge requirements developed by the RWOCB, among other requirements, must be consistent with this policy. The proposed Project would be constructed and operated in conformance with objectives of the Water Quality Control Policy through controls on construction activities (dredging and fill, wharf construction) and on operations (stormwater and other discharges). Air Quality Management The federal Clean Air Act (CAA) and its subsequent amendments establish the Plan National Ambient Air Quality Standards (NAAQS) and delegate the enforcement of these standards to the states. In areas that exceed the NAAQS, the CAA requires states to prepare a State Implementation Plan (SIP) that details how the NAAOS will be achieved within mandated time frames. The CAA identifies emission reduction goals and compliance dates based on the severity of the ambient air quality standard violation within an area. The California Clean Air Act (CCAA) outlines a program to attain the more stringent California Ambient Air Quality Standards (CAAQS) for O₃, NO₂, SO₂, and CO by the earliest practical date. The Lewis Air Quality Act of 1976 established the South Coast Air Quality Management District (SCAQMD), created SCAOMD jurisdiction over the four-county South Coast Air Basin, and mandated a planning process requiring preparation of an Air Quality Management Plan (AOMP). The 2003 AQMP (SCAG, 2007) proposes emission reduction strategies that will enable the South Coast Air Basin to achieve the national and most state ambient air quality standards within the mandated time frames. The proposed Project would be consistent with this plan, and discussions with the Southern California Association of Governments (SCAG) determined that construction and operation of the proposed Project are consistent with SCAG regional employment and population growth forecasts, which were used in the development of the 2003 AQMP. California Air Resources California Air Resources Board (CARB) approved the Emission Reduction Plan for

Board - Emission Reduction Plan for Ports and Goods Movement

Ports and Goods Movement (CARB, 2006) on April 20, 2006. All of the proposed mitigations in this EIR were developed as part of the Port's Clean Air Action Plan (POLA and POLB, 2006; see Section 1.6). Thus, the Port Air Quality Plan complies with CARB goals and meets and/or exceeds all reduction strategies.

Table 2. Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

Applicable Ruling	Description
AB 32	On September 27, 2006, Governor Schwarzenegger signed AB 32, the Global Warming Solutions Act. The Act caps California's greenhouse gas emissions at 1990 levels by 2020. This legislation represents the first enforceable statewide program in the United States to cap all GHG emissions from major industries that includes penalties for noncompliance. It requires the State Air Resources Board to establish a program for statewide greenhouse gas emissions reporting and to monitor and enforce compliance with this program. The proposed Project's consistency with AB 32 cannot be accurately evaluated until the Air Resources Board establishes its program.
Southern California Association of Governments Regional Plans	Southern California Association of Governments (SCAG) is responsible for developing regional plans for transportation management, growth, and land use, as well as developing the growth factors used in forecasting air emissions within the South Coast Air Basin. SCAG has developed a Growth Management Plan (GMP), a Regional Housing Needs Assessment, a Regional Mobility Plan (RMP), and in cooperation with the SCAQMD, the AQMPs. The proposed Project would not generate population migration into the area or create a demand for new housing units, and thus would be consistent with these plans.
Congestion Management Plan	The Congestion Management Program (CMP) is a state-mandated program intended as the analytical basis for transportation decisions made through the State Transportation Improvement Program process (LACMTA, 1993). The CMP was developed to: (1) link land use, transportation, and air quality decisions; (2) develop a partnership among transportation decision makers on devising appropriate transportation solutions that include all modes of travel; and (3) propose transportation projects that are eligible to compete for state gas tax funds. The CMP includes a Land Use Analysis Program, which requires local jurisdictions to analyze the impacts of land use decisions on the regional transportation system. For development projects, an EIR is required based on local determination and must incorporate a Transportation Impact Analysis into the EIR. This EIR does include a transportation impact analysis and thus is consistent with the CMP.
Water Quality Regulations	The Rivers and Harbors Act of 1899, Section 10; federal Water Pollution Control Act (as amended by the Clean Water Act of 1977), Section 404; California Hazardous Waste Control Act; State Water Resources Control Board, Enclosed Bays and Estuaries Plan; Water Quality Control Plan for the Los Angeles River Basin (Region 4B), adopted by the Regional Water Quality Control Board, Los Angeles Region; and Sections 401 and 402 of the Clean Water Act of 1977.
Air Quality Regulations	Clean Air Act, Title 40 CFR Parts 50 and 51 as amended; Prevention of Significant Deterioration, Titles 40 CFR Part 51.24 and 40 CFR Part 52.21; California Clean Air Act; Air Quality Management Plan of the City of Los Angeles General Plan, Air Quality Element; and SCAQMD Regulations X111 and XV, New Source Review and Rules 212, 401, 403, and 431.2.

Table 2. Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

Applicable Ruling	Description
Transportation Regulations	California Public Utilities Commission Guidelines; Federal Railroad Administration Guidelines; Federal Highway Administration Guidelines; California Transportation Guidelines; California Administrative Code Section 65302 (f)-Noise Element; City of Long Beach Noise Control Ordinance, No. C-5371; Federal Aid Highway Program Manual 7-7-3; USACE Regulation 1105-2-100; National Environmental Compliance, 91-190; United States Coast Guard Regulations Pertaining to Navigation Safety and Waterfront Facilities; State and Federal Department of Transportation Requirements regarding Track and Rail Transportation of Hazardous Materials; NEPA of 1969 as Amended (Public Law 91-190); and USACE Regulation 1105-2-100, Economic and Environmental Principles and Guidelines for Water and Related Land Resource Implementation Studies.
Biological Resources Protection	Endangered Species Act of 1973, as amended; Marine Mammal Protection Act; Migratory Bird Conservation Act; Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972; California Endangered Species Act; Section 302 of the Marine Protection, Research, and Sanctuaries Act of 1972; United States Fish and Wildlife Act of 1956 (16 USC 742a <i>et seq.</i>); Fish and Wildlife Coordination Act (16 USE 661 <i>et seq.</i>); Magnuson-Stevens Fishery Conservation and Management Act, as amended through 1996; Executive Order 13112, Invasive Species; Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (P.L 01-646), as amended by the National Invasive Species Act of 1996; Ballast Water Management for Control of Nonindigenous Species Act of 1999 (PRC Sections 71200-71271).
Cultural Resources Protection	National Historic Preservation Act of 1966, as amended, and its implementing regulations (36 CFR 800); the Archaeological and Historical Preservation Act and Executive Order 11593 "Protection and Enhancement of the Cultural Environment." In compliance with federal laws, regulations, and other guidelines, the USACE will use this Recirculated Draft EIS/EIR and resource evaluation studies (e.g., Jones & Stokes, 2001) to consult with the State Historic Preservation Officer (SHPO) regarding any effect the project may have on cultural resources listed or eligible for listing on the National Register of Historic Places.
Environmental Justice	Executive Order 12898 requires that "to the greatest extent practicable, each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations." California adopted legislation addressing environmental justice in 1999 with the passage of Senate Bill (SB) 115 (Government Code Section 65040.12[c]), which established the Governor's Office of Planning and Research as the lead agency responsible for implementation of federal and state environmental justice policies in California. SB 115 defines environmental justice as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws and policies." In 2000, the Governor signed the related SB 89 requiring that the Secretary for Environmental Protection convene a Working Group to assist California Environmental Protection Agency (CalEPA) in developing an environmental justice strategy.

Monitoring and Reporting Procedures

Mitigation measures will be implemented in accordance with the LAHD Environmental Management Division's (LAHD/EMD) Environmental Compliance Plan program. Prior to release of bid specifications, construction plans shall be provided to LAHD/EMD for review and approval. Operational mitigation measures will be monitored by LAHD/EMD and any specified responsible parties designated by LAHD/EMD.

This MMRP for the proposed project will be in place through all phases of the project, including design, construction, and operation, and will help ensure that project objectives are achieved. The LAHD shall be responsible for administering the MMRP and ensuring that all parties comply with its provisions. The LAHD may delegate monitoring activities to staff, consultants, or contractors. All construction contractors shall submit an Environmental Compliance Plan for Construction Management and EMD approval prior to beginning construction activities. This plan shall document how the contractor intends to comply with all measures applicable to the contract including application of Best Management Practices (BMPs). All mitigation measures and leasing policy requirements will be included in leases and lease amendments. The LAHD also will ensure that monitoring is documented through periodic reports and that deficiencies are promptly corrected. The designated environmental monitor will track and document compliance with mitigation measures, note any problems that may result, and take appropriate action to rectify problems.

Mitigation Monitoring and Reporting Program Implementation

Pursuant to AB 3180, this MMRP was prepared and is accompanied by the associated report forms utilized to verify compliance with individual mitigation measures. This MMRP identifies each mitigation measure by discipline, the entity (organization) responsible for its implementation, the report/permit/certification required for each measure, and an accompanying LAHD MMRP form used to certify completion. Certain inspections and reports may require preparation by qualified individuals, and these are specified as needed. The timing and method of verification for each measure is also specified.

Section 2 Mitigation Monitoring and Reporting Program Summary

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berth 97-109 [China Shipping] Container Terminal Project

Miti	gation Measure	Timing and Methods	Responsible Parties
Aes	thetics:		
MM	AES-1	Timing: Prior to Phase II operation	Implementation: LAHD
1.	Reconfigure fence line bordering Front Street to create a 5-foot-wide planting strip alongside the edge of the street that will be planted with low shrubs and some trees. Plant species used for the re-landscaping must be selected for their attractiveness, their relationship to existing planting themes in the surrounding area, and their environmental values. The plants installed must be of an adequate size to create an attractive planting composition within 5 years.	Methods: This measure shall be LAHD contract specifications. LAHD shall either hire a landscape consultant and construction firm or perform such work itself.	Monitoring and Reporting: Environmental Management Division, Real Estate
2.	Implement the recommendations of the Northwest Harbor Beautification Plan as applicable. The recommendations include landscaping two gateways to the Port: the area adjacent to the Channel Street on- and offramps from I-110 and SR-47; and the Harbor Boulevard on- and offramps from SR-47. Planting shall be designed to promote erosion control along all hillsides		
	AES-2	Timing: Prior to receipt of the cranes.	Implementation: LAHD and China Shipping
	ify a gray color for the cranes that to make them visually distinct from the ent Thomas Bridge, reduce their contrast with the sky backdrop, and reduce	Methods: LAHD shall work with China Shipping to	China Shipping
their shou as the	visual prominence and apparent mass. An appropriate shade of gray ld be specified as the color for repainting the four cranes now at the site and e factory-applied color for the six additional cranes proposed for llation.	identify a color prior ordering new cranes. LAHD shall repaint the 4 existing cranes on site.	Monitoring and Reporting: Environmental Management Division, Real Estate
MM	AES-3	Timing: Prior to Phase III operation	Implementation: LAHD
Char porti- Char creat with Pacif	ffset the reduction in the quality of views from the upper portions of the mel Street corridor, implement beautification plan improvements along the on of John S. Gibson Boulevard and Pacific Avenue at the intersection of mel Street. These improvements, which will include landscaping and ion of view areas of the Port, walkways, and bike paths, should be designed the objectives of upgrading the visual quality of the eastern end of the fic Avenue corridor and creating an attractive gateway to the Port that links the system of amenities the Port is developing along the western edge of	Methods: This measure shall be LAHD contract specifications. LAHD shall either hire a landscape consultant and construction firm or perform such work itself. Utility pole work shall be completed in the LAHD's Engineering Division.	Monitoring and Reporting: Environmental Management Division, Real Estate

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
Port lands. One of the key improvements proposed is removal of a large billboard and deteriorated building on the east side of Pacific Avenue adjacent to the China Shipping site and close to the intersection with Channel Street. Removal of the billboard and building will improve the visual quality of this area and will provide space for installation of landscaping and visitor amenities.		
Additionally, the utility poles along this segment will be removed and all utility lines will be placed underground if feasible. Placement of utility lines underground will be subject to cost feasibility. If costs exceed \$1,000 per linear foot, the Port will reassess placement of utility lines underground and propose alternative measures, such as additional landscaping and/or reduced numbers of underground utility placements. The Port also will begin negotiations to remove and possibly relocate a truck resale facility on the northeast corner of the Pacific Avenue and Front Street intersection. When removed, the vacated area would be landscaped with vegetation consistent with the Pacific Avenue Corridor Improvements.		
MM AES-4 Implement plans to improve the role of Plaza Park as a place to enjoy views of the Port and of the Vincent Thomas Bridge. Design components should include a system of safe, attractive, pedestrian paths and stairways. This system should include signs, arrows, and other design elements that direct visitors up to the park to take advantage of the opportunities that it provides to view the Port. Improvements in the park itself should include new walkways and railings; a Harbor overview seating area; a Port and bridge overlook area with interpretive signage and improved view corridors; a visitor center; and upgraded landscaping, lighting, and other improvements to make the park a safe and attractive place from which Port and bridge views could be appreciated.	Methods: LAHD shall construct the Plaza Park per the recommendations of the Plaza Park project approved as part of the China Shipping Aesthetics Mitigation Fund. This measure shall be LAHD contract specifications. Utility pole work shall be completed in the LAHD's Engineering Division.	Implementation: LAHD Monitoring and Reporting: Environmental Management Division, Real Estate
Air Quality and Meteorology: Construction		
MM AQ-1 Harbor Craft used during construction	Timing: Throughout all construction phases.	Implementation: LAHD
<u>Phase I</u> : All diesel-powered derrick barges used for pile driving shall use emulsified diesel fuel.	Methods: This measure shall be incorporated into the LAHD contract specifications for all construction	through Construction Contractor
<u>Phases II and III</u> : All harbor craft used during the construction phase of the project shall be, at a minimum, repowered to meet the cleanest existing marine engine emission standards or USEPA Tier 2. Additionally, where available,	work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an Environmental Compliance Plan for review and	Monitoring and Reporting: Environmental Management

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
harbor craft shall meet the proposed USEPA Tier 3 (which are proposed to be phased-in beginning 2009) or cleaner marine engine emission standards.	approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications. The construction equipment measures shall be met, unless one of the following circumstances exist and the contractor is able to provide proof that any of these circumstances exists: 1. A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement. 2. A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available. 3. A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled	Division, Construction Management Division
	equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease.	

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
MM AQ-2: Cargo Ships	Timing: Throughout Phases II and III construction	Implementation: LAHD through Construction
Phases II and III: All cargo ships used for terminal crane deliveries shall comply with the expanded VSRP of 12 knots from 40 nm from Point Fermin to the Precautionary Area	Methods: This measure shall be incorporated into the LAHD contract specifications for all construction work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division

Table 2-1. Continued

Mitigation Measure Timing and Methods Responsible Parties Implementation: LAHD MM AQ-3: Fleet Modernization for On-Road Trucks Timing: Throughout Phases II and III construction through Construction Phases II and III: **Methods:** This measure shall be incorporated into the Contractor 1. Trucks hauling materials such as debris or fill shall be fully covered LAHD contract specifications for all construction while operating off Port property. work to reduce the impact of construction diesel **Monitoring and Reporting:** emissions. The contractor(s) shall submit an 2. Idling shall be restricted to a maximum of 5 minutes when not in use. **Environmental Management** Environmental Compliance Plan for review and Division, Construction 3. USEPA Standards: approval by LAHD prior to beginning of any Management Division construction activity. The contractor shall adhere to All on-road heavy-duty diesel trucks with a gross vehicle weight rating these specifications and Compliance Plan throughout (GVWR) of 19,500 pounds or greater used onsite or to transport materials to and from the site shall comply with EPA 2004 on-road PM construction phases. Enforcement shall include oversight by the LAHD project/construction manager emission standards and be the cleanest available NOX (0.10 grams per brake horsepower-hour [g/bhp-hr] PM10 and 2.0 g/bhp-hr NO X). In or designated building inspectors to ensure addition, all on-road trucks shall be outfitted with Best Available compliance with contract specifications. Control Technology (BACT) devices certified by CARB. Any The construction equipment measures shall be met, emissions-control device used by the contractor shall achieve emissions unless one of the following circumstances exist and the reductions no less than what could be achieved by a Level 3 diesel contractor is able to provide proof that any of these emissions control strategy for a similar-sized engine as defined by circumstances exists: CARB regulations. A copy of each unit's certified, USEPA rating, BACT documentation, 1. A piece of specialized equipment is unavailable and each unit's CARB or SCAQMD operating permit, shall be in a controlled form within the state of provided at the time of mobilization of each applicable unit of California, including through a leasing equipment. agreement. 2. A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available. 3. A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer.

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease.	

Table 2-1. Continued

Timing and Methods Mitigation Measure Responsible Parties Implementation: LAHD **MM AQ-4: Fleet Modernization for Construction Equipment** Timing: Throughout Phases II and III construction through Construction Phases II and III: **Methods:** This measure shall be incorporated into the Contractor LAHD contract specifications for all construction 1. Construction equipment shall incorporate, where feasible, emissionssavings technology such as hybrid drives and specific fuel economy work to reduce the impact of construction diesel Monitoring and Reporting: emissions. The contractor(s) shall submit an standards. **Environmental Management** Environmental Compliance Plan for review and Division, Construction Idling shall be restricted to a maximum of 5 minutes when not in use. approval by LAHD prior to beginning of any Management Division 3. Tier Specifications: construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout January 1, 2009, to December 31, 2011: All off-road dieselpowered construction equipment greater than 50 hp, except construction phases. Enforcement shall include oversight by the LAHD project/construction manager derrick barges and marine vessels, shall meet Tier 2 offroad emissions standards. In addition, all construction or designated building inspectors to ensure equipment shall be outfitted with BACT devices certified by compliance with contract specifications. CARB. Any emissions-control device used by the The construction equipment measures shall be met, Contractor shall achieve emissions reductions no less than unless one of the following circumstances exist and the what could be achieved by a Level 2 or Level 3 diesel contractor is able to provide proof that any of these emissions control strategy for a similar-sized engine as circumstances exists: defined by CARB regulations. Post January 1, 2012: All off-road diesel-powered 1. A piece of specialized equipment is unavailable construction equipment greater than 50 hp, except derrick in a controlled form within the state of barges and marine vessels, shall meet Tier 3 off-road California, including through a leasing emissions standards. In addition, all construction equipment agreement. shall be outfitted with BACT devices certified by CARB. Any emissions-control device used by the Contractor shall 2. A contractor has applied for necessary incentive achieve emissions reductions no less than what could be funds to put controls on a piece of uncontrolled achieved by a Level 2 or Level 3 diesel emissions-control equipment planned for use on the project, but strategy for a similar-sized engine as defined by CARB the application process is not yet approved, or regulations. the application has been approved, but funds A copy of each unit's certified Tier specification, BACT are not yet available. documentation and each unit's CARB or SCAQMD operating permit, shall be provided at the time of mobilization of each applicable unit of 3. A contractor has ordered a control device for a equipment. piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the

uncontrolled equipment, but that order has not been completed by the manufacturer or dealer.

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease.	
 MM AQ-5: Best Management Practices Phases II and III: The following types of measures are required on construction equipment (including on-road trucks): Use of diesel oxidation catalysts and catalyzed diesel particulate traps Maintain equipment according to manufacturers' specifications Restrict idling of construction equipment and on-road heavy-duty trucks to a maximum of 5 minutes when not in use Install high-pressure fuel injectors on construction equipment vehicles Maintain a minimum buffer zone of 300 meters between truck traffic and sensitive receptors Improve traffic flow by signal synchronization Enforce truck parking restrictions Provide on-site services to minimize truck traffic in or near residential areas, including, but not limited to, the following services: meal or cafeteria services, automated teller machines, etc. Re-route construction trucks away from congested streets or sensitive receptor areas Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site 	Timing: Throughout Phases II and III construction. Methods: This measure shall be incorporated into the LAHD contract specifications for all construction work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
11. Use electric power in favor of diesel power where available. LAHD shall implement a process by which to select additional BMPs to further reduce air emissions during construction. The LAHD shall determine the BMPs once the contractor identifies and secures a final equipment list.		
 MM AQ-6: Additional Fugitive Dust Controls The calculation of fugitive dust (PM10) from Project earth-moving activities assumes a 75 percent reduction from uncontrolled levels to simulate rigorous watering of the site and use of other measures (listed below) to ensure Project compliance with SCAQMD Rule 403. The construction contractor shall further reduce fugitive dust emissions to 90 percent from uncontrolled levels. The construction contractor shall designate personnel to monitor the dust control program and to order increased watering, as necessary, to ensure a 90 percent control level. Their duties shall include holiday and weekend periods when work may not be in progress. The following measures, at minimum, must be part of the contractor Rule 403 dust control plan: Active grading sites shall be watered one additional time per day beyond that required by Rule 403. Contractors shall apply approved non-toxic chemical soil stabilizers according to manufacturer's specifications to all inactive construction areas or replace groundcover in disturbed areas (previously graded areas) inactive for ten days or more. Construction contractors shall provide temporary wind fencing around sites being graded or cleared. Trucks hauling dirt, sand, or gravel shall be covered in accordance with Section 23114 of the California Vehicle Code. Construction contractors shall install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off tires of vehicles and any equipment leaving the construction site The grading contractor shall suspend all soil disturbance activities when 	Timing: Throughout Phases II and III construction Methods: This measure shall be incorporated into the LAHD contract specifications for all construction work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division
 The grading contractor shall suspend all soil disturbance activities when winds exceed 25 mph or when visible dust plumes emanate from a site; 		

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
 disturbed areas shall be stabilized if construction is delayed. Pave road and road shoulders. Require the use of clean-fueled sweepers pursuant to SCAQMD Rule 1186 and Rule 1186.1 certified street sweepers. Sweep streets at the end of each day if visible soil is carried onto paved roads on-site or roads adjacent to the site to reduce fugitive dust emissions. Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM₁₀ generation. Traffic speeds on all unpaved roads shall be reduced to 15 mph or less. Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow. Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the extent practicable. 		
MM AQ-7: General Mitigation Measure. For any of the above mitigation measures (MM AQ-1 through AQ-6), if a CARB-certified technology becomes available and is shown to be as good as or better in terms of emissions performance than the existing measure, the technology could replace the existing measure pending approval by the Port	Timing: Throughout Phases II and III construction Methods: This measure shall be incorporated into the LAHD contract specifications for all construction work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division
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	Timing: Throughout Phases II and III construction Methods: This measure shall be incorporated into the	Implementation: LAHD through Construction

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
these sites in writing at least 30 days before construction activities begin.	LAHD contract specifications for all construction work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division
MM AQ-25: LEED. The main terminal building shall obtain the Leadership in Energy and Environmental Design (LEED) gold certification level. LEED certification is made at one of the following four levels, in ascending order of environmental sustainability: certified, silver, gold, and platinum. The certification level is determined on a point-scoring basis, where various points are given for design features that address the following areas (U.S. Green Building Council, 2005): • Sustainable Sites • Water Efficiency • Energy & Atmosphere • Materials & Resources • Indoor Environmental Quality • Innovation & Design Process As a result, a LEED-certified building will be more energy efficient, thereby reducing GHG emissions compared to a conventional building design.	Timing: Throughout Phases II and III construction Methods: This measure shall be incorporated into the LAHD contract specifications for all construction work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
MM AQ-23: Compact Fluorescent Light Bulbs All interior terminal building lighting shall use compact fluorescent light bulbs and the tenant shall maintain and replace all compact fluorescent bulbs.	Timing: Throughout Phases II and III construction Methods: This measure shall be incorporated into the LAHD contract specifications for all construction work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division
MM AQ-28: Solar Panels The applicant shall install solar panels on the administration building.	Timing: Throughout Phases II and III construction Methods: This measure shall be incorporated into the LAHD contract specifications for all construction work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division
MM AQ-30: Tree Planting The applicant shall plant shade trees around the administration building. All shade trees shall be maintained over the life of the project.	Timing: Throughout Phases II and III construction Methods: This measure shall be incorporated into the LAHD contract specifications for all construction work to reduce the impact of construction diesel emissions. The contractor(s) shall submit an	Implementation: LAHD through Construction Contractor Monitoring and Reporting:

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	Environmental Management Division, Construction Management Division
Air Quality and Meteorology: Operation		
 MM AQ-9: Alternative Maritime Power (AMP). China Shipping ships calling at Berths 97-109 must use AMP at the following percentages while hoteling in the Port: January 1 to June 30, 2005: 60 percent of total ship calls (ASJ Requirement) July 1, 2005: 70 percent of total ship calls (ASJ Requirement) January 1, 2010: 90 percent of ship calls January 1, 2011, and thereafter: 100 percent of ship calls Additionally, by 2010, all ships retrofitted for AMP shall be required to use AMP while hoteling at a 100 percent compliance rate, with the exception of circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship. 	Timing: Throughout all operational years. Methods: This measure shall be incorporated into the lease. China Shipping shall submit bi-annual compliance report documenting compliance to the Environmental Management Division. Vessel calls shall be monitored by the Wharfingers Office and the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: Marine Exchange, LAHD Wharfingers, Environmental Management and Real Estate Divisions
MM AQ-10: Vessel Speed Reduction Program. All ships calling at Berths 97-109 shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area in the following implementation schedule: • 2009 and thereafter: 100 percent	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. China Shipping shall submit quarterly reporting forms documenting compliance to LAHD. Environmental Management Division will independently monitor through monitoring data	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Wharfingers, Environmental Management and Real Estate Divisions

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	provided by the Marine Exchange. Bi-annual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	
 MM AQ-11: Low-Sulfur Fuel. All ships (100 percent) calling at Berth 97-109 shall use low-sulfur fuel (maximum sulfur content of 0.2 percent) in auxiliary engines, main engines, and boilers within 40 nm of Point Fermin (including hoteling for non-AMP ships) beginning on Day 1 of operation. Ships with mono-tank systems or having technical issues prohibiting use of low-sulfur fuel would be exempt from this requirement. The tenant shall notify the Port of such vessels prior to arrival and shall make every effort to retrofit such ships within 1 year. The following annual participation rates were assumed in the air quality: 2009 and thereafter: 30 percent of auxiliary engines, main engines, and boilers 2010: 50 percent of auxiliary engines, main engines, main engines, and boilers 2013 and thereafter: 100 percent of auxiliary engines, main engines, and boilers 	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Vessel calls shall be monitored by the Wharfingers Office and the Environmental management Division. Bi-annual tenant compliance reports shall be supplied to the Environmental Management Division Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Wharfingers, Environmental Management and Real Estate Divisions
MM AQ-12: Slide Valve. Ships calling at Berths 97-109 shall be equipped with slide valves or equivalent on main engines in the following percentages: • 2009: 25 percent • 2010: 50 percent • 2012: 75 percent • 2014 and thereafter: 100 percent	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
MM AQ-13: Reroute Cleaner Ships When scheduling vessels for service to the Port of Los Angeles, Tenant shall ensure that 75 percent of all ship calls to the Berth 97-109 Terminal meet IMO MARPOL Annex VI NO _X emissions limits for Category 3 engines.	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions
MM AQ-14: New Vessel Build The purchaser shall confer with the ship designer and engine manufacture to determine the feasibility of incorporating all emission reduction technology and/or design options and when ordering new ships bound for the Port of Los Angeles. Such technology shall be designed to reduce criteria pollutant emissions (NO _X , SO _X and PM) and GHG emission (CO, CH ₄ , O ₃ , and CFCs). Design considerations and technology shall include, but are not limited to: 1. Selective Catalytic Reduction Technology 2. Exhaust Gas Recirculation 3. In-line fuel emulsification technology 4. Diesel Particulate Filters (DPFs) or exhaust scrubbers 5. Common Rail 6. Low NO _X Burners for Boilers 7. Implement fuel economy standards by vessel class and engine Diesel-electric pod propulsion systems	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant feasibility reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
MM AQ-15: Yard Tractors at Berth 97-109 Terminal All yard tractors operated at the Berth 97-109 terminal shall run on alternative fuel (LPG) beginning September 30, 2004, until December 31, 2014 (ASJ Requirement). Beginning in January 1, 2015, all yard tractors operated at the Berth 97-109 terminal shall be the cleanest available NO _X alternative-fueled engine meeting 0.015 gm/hp-hr for PM	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions
 MM AQ-16: Yard Equipment at Berth 121-131 Rail Yard. All diesel-powered equipment operated at the Berth 121-131 terminal rail yard that handles containers moving through the Berth 97-109 terminal shall implement the following measures: • Beginning January 1, 2009, all equipment purchases shall be either (1) the cleanest available NO_X alternative-fueled engine meeting 0.015 gm/hp-hr for PM or (2) the cleanest available NO_X diesel-fueled engine meeting 0.015 gm/hp-hr for PM. If there are no engines available that meet 0.0150 gm/hp-hr for PM, the new engines shall be the cleanest available (either fuel type) and will have the cleanest VDECS. • By the end of 2012, all equipment less than 750 hp shall meet the USEPA Tier 4 on-road or Tier 4 non-road engine standards. By the end of 2014, all equipment shall meet USEPA Tier 4 non-road engine standards 	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
 MM AQ-17: Yard Equipment at Berth 97-109 Terminal September 30, 2004: All diesel-powered toppicks and sidepicks operated at the Berth 97-109 terminal shall run on emulsified diesel fuel plus a DOC (ASJ Requirement). January 1, 2009:	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
MM AQ-18: Yard Locomotives at Berth 121-131 Rail Yard Beginning January 1, 2015, all yard locomotives at the Berth 121-131 Rail Yard that handle containers moving through the Berth 97-109 terminal shall be equipped with a diesel particulate filter (DPF).	Timing: 2015 Methods: This measure shall be incorporated into the PHL lease.	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions
MM AQ-19: Clean Truck Program The tenant shall comply with the Port's Clean Truck Program. Based on participation in the Clean Truck Program, Heavy-duty diesel trucks entering the Berth 97-109 terminal shall meet the USEPA 2007 emission standards for onroad heavy-duty diesel engines (USEPA, 2001) in the following percentages: • 2009: 50 percent USEPA 2007 • 2010: 70 percent USEPA 2007 • 2011: 90 percent USEPA 2007	Timing: Throughout Phases II and III operational years. Methods: Gate modification provisions shall be incorporated into the lease. The tenant shall install appropriate gate modifications to comply with the CTP. LAHD shall be responsible for the trucks. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: LAHD for trucks and China Shipping for gate modifications. Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions
 MM AQ-20: LNG Trucks. Heavy-duty trucks entering the Berth 97-109 Terminal shall be LNG fueled in the following percentages. 50 percent in 2012 and 2013 70 percent in 2014 through 2017 100 percent in 2018 and thereafter 	Timing: Beginning in 2013 Methods: Gate modification provisions shall be incorporated into the lease. The tenant shall install appropriate gate modifications to track the LNG trucks. LAHD shall be responsible for the trucks. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: LAHD for trucks and China Shipping for gate modifications. Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
MM AQ-21: Truck Idling Reduction Measure Within 6 months of the effective date and thereafter for the remaining term of the Berth 97-109 Permit and any holdover, the Berth 97-109 terminal operator shall ensure that truck idling is reduced to less than 30 minutes in total or 10 minutes at any given time while on the Berth 97-109 terminal through measures that include, but are not limited to, the following: (1) operator shall maximize the durations when the main gates are left open, including during off-peak hours (6 pm to 7 am), (2) operator shall implement a container tracking and appointment-based truck delivery and pick-up system to minimize truck queuing (trucks lining up to enter and exit the terminal's gate), and (3) operator shall design the main entrance and exit gates to exceed the average hourly volume of trucks that enter and exit the gates (truck flow capacity) to ensure queuing is minimized	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions
MM AQ-26: Compact Fluorescent Light Bulbs: All interior terminal building lighting shall use compact fluorescent light bulbs. Fluorescent light bulbs produce less waste heat and use substantially less electricity than incandescent light bulbs.	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Initial bulbs will be supplied by the LAHD. China Shipping shall be responsible for replacing such bulbs in kind. Biannual tenant compliance reports shall be supplied to the Environmental Management Division Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
MM AQ-27: Energy Audit: The tenant shall conduct a third party energy audit every five years and install innovative power saving technology where feasible, such as power factor correction systems and lighting power regulators. Such systems help to maximize usable electric current and eliminate wasted electricity, thereby lowering overall electricity use.	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions
MM AQ-29: Recycling. The terminal buildings shall achieve a minimum of 40 percent recycling by 2012 and 60 percent recycling by 2015. Recycled materials shall include: • White and colored paper • Post-it notes • Magazines • Newspaper • File folders • All envelopes including those with plastic windows • All cardboard boxes and cartons • All metal and aluminum cans • Glass bottles and jars • All plastic bottles	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions
LEASE MEASURES : The following measures are lease measures that will be included in the lease for Berth 97-109 due to projected future emissions levels. The measures do not meet all of the criteria for CEQA and NEPA mitigation measures, but are considered important lease measures to reduce future emissions. This lease obligation is distinct from the requirement of further CEQA or NEPA mitigation measures to address impacts of potential subsequent discretionary Project approvals		
MM AQ-22: Periodic Review of New Technology and Regulations. The Port shall require the Berth 97-109 tenant to review, in terms of feasibility, 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 Berth 97-109 property. If the technology is determined by the Port to be	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Feasibility reports shall take place at the time of the Port's consideration of any lease amendment or	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
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. Over the course of the lease, the tenant and the Port shall work together to identify potential new technology. Such technology shall be studied for feasibility, in terms of cost, technical and operational feasibility. 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.	facility modification for the China Shipping property or every seven years if no amendment or modification has been considered. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Divisions
MM AQ-23: Throughput Tracking. If the Project exceeds project throughput assumptions/projections anticipated through the years 2010, 2015, 2030, or 2045, staff shall evaluate the effects of this on the emissions sources (ship calls, locomotive activity, backland development, and truck calls) relative to the EIS/EIR. If it is determined that these emissions sources exceed EIS/EIR assumptions, staff would evaluate actual air emissions for comparison with the EIS/EIR and if the criteria pollutant emissions exceed those in the EIS/EIR, then new or additional mitigations would be applied through MM AQ-22.	Timing: Throughout Phases II and III operational years. Methods: This measure shall be incorporated into the lease. Throughput shall be monitored by the Wharfingers Office and the Environmental Management Division. Environmental Management Division shall report on throughput in 2010, 2015, 2030 and 2045 and numbers shall be made available to the Board at a regularly scheduled public Board Meeting. If it is determined that these emission sources exceed EIR assumptions, staff would evaluate actual air emissions for comparison with the EIR and if the criteria pollutant emissions exceed those in the EIR, then new/additional mitigations would be applied through MMAQ-21 and MMAQ-24.	Implementation: China Shipping and LAHD Monitoring and Reporting: LAHD Wharfingers, Environmental Management and Real Estate Divisions
MM AQ-24: General Mitigation Measure. For any of the above mitigation measures (MM AQ-9 through AQ-21), 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	Timing: Throughout Phases II and III operational years Methods: This measure shall be incorporated into the lease. If the tenant proposes replacing any mitigation	Implementation: LAHD and China Shipping and LAHD Monitoring and Reporting:

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
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.	measure, the tenant must first make a formal request to the Port's Executive Director. The Executive Director will then consider the proposal. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	LAHD Wharfingers, Environmental Management and Real Estate Divisions
Biology: Construction		
BIO-1: Mitigation Credits Compensate for loss of marine habitat (EFH) and loss of benthic communities in the West Basin through use of existing mitigation bank credits.	Timing: Prior to Phase II and III dredging Methods: This measure shall be the responsibility of the Environmental Management Division (EMD) and Engineering Division.	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management Division and
MM BIO-3: Noise Reduction during Pile Driving The contractor shall be required to use sound abatement techniques to reduce both noise and vibrations from pile driving activities. Sound abatement techniques shall include, but are not limited to, vibration or hydraulic insertion techniques, drilled or augured holes for cast-in-place piles, bubble curtain technology, and sound aprons where feasible. At the initiation of each pile driving event, and after breaks of more than 15 minutes the pile driving shall also employ a "soft-start" in which the hammer is operated at less than full capacity (i.e., approximately 40–60% energy levels) with no less than a 1-minute interval between each strike for a 5-minute period.	Timing: Throughout Phases II and III construction. Methods: This measure shall be incorporated into LAHD contract specifications for all construction work. The construction contractor shall instruct construction personnel as part of normal construction procedures. LAHD shall arrange for the presence of the monitor during construction activity.	Engineering Division. Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division
In addition, a qualified biologist hired by the Port shall be required to monitor the area in the vicinity of pile driving activities for any fish kills during pile driving. If there are any reported fish kills, pile driving shall be halted and the USACE and NMFS shall be notified via the Port's Environmental Management Division. The biological monitor shall also note (surface scan only) whether marine mammals are present within 100 meters of the pile driving, and if any are observed, temporarily halt pile driving until the observed mammals move beyond this distance.		

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
Biology: Operation		
MM BIO-2: Vessel Speed Reduction Program. All ships calling at Berths 97-109 shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area in the following implementation schedule: 100 percent starting in 2009.	Timing: Throughout all operational years. Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be supplied to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: China Shipping and LAHD Monitoring and Reporting LAHD Environmental Management and Real Estat Divisions
Cultural Resources		
MM CR-1: In the unlikely event that any artifact, or an unusual amount of bone, shell, or non-native stone is encountered during construction, work shall be immediately stopped and relocated to another area. The contractor shall stop construction within 10 meters (30 feet) of the exposure of these finds until a qualified archaeologist can be retained by the Port to evaluate the find (see 36 CFR 800.11.1 and pertinent CEQA regulations). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology such as obsidian or fused shale; historical trash pits containing bottles and/or ceramics; or structural remains. If the resources are found to be significant, they shall be avoided or shall be mitigated consistent with SHPO Section 106 and CEQA Guidelines. All construction equipment operators shall attend a preconstruction meeting presented by a professional archaeologist retained by the Port that shall review types of cultural resources and artifacts that would be considered potentially significant, to ensure operator recognition of these materials during construction. Prior to beginning construction, the Port shall meet with applicable Native American Groups, including the Gabrielino/Tongva Tribal Council to identify areas of concern. A trained archaeologist shall monitor construction at identified areas. In addition to monitoring, a treatment plan shall be developed	Timing: During Project Construction Methods: To avoid or reduce this potential impact, the Environmental Management Division (EMD) shall retain a qualified archaeologist. The Construction Manager/Contractor shall instruct construction personnel as part of normal construction procedures to halt/redirect construction activities if any materials are uncovered that are suspect of being associated with historical or prehistoric occupation. If materials are found, the construction contractor shall contact the Construction Manager, EMD, the archeologist and/or the County Coroner.	Implementation: LAHD through Construction Contractor Monitoring and Reporting Environmental Management Division, Construction Management Division

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
in conjunction with the Native American Groups to establish the proper way of extracting and handling all artifacts in the event of an archaeological discovery.		
Geological Resources		
GEO-1: Emergency Response Planning. The terminal operator shall work with Port engineers and Port police to develop tsunami response training and procedures to assure that construction and operations personnel will be prepared to act in the event of a large seismic event. Such procedures shall include immediate evacuation requirements in the event that a large seismic event is felt at the proposed Project site, as part of overall emergency response planning for this proposed Project.	Timing: At beginning of Construction and within first year of Operation (with annual updates) Method: Construction: LAHD Engineering Division shall provide procedures for inclusion in bid specifications. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications Method: Operations: General requirements of this measure shall be incorporated into the lease. China Shipping and LAHD shall prepare an emergency response plan for submittal to the LAHD within first year of operation. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.	Implementation: LAHD through Construction Contractor; China Shipping and LAHD for operations. Monitoring and Reporting: Environmental Management Division, Port Operations, Construction Management Division, Real Estate Division.
Ground Transportation		
MM TRANS-1: Avalon Boulevard and Harry Bridges Boulevard	Timing: Prior to 2015.	Implementation: LAHD
Provide an additional eastbound and westbound left-turn lane on Harry Bridges Boulevard. This measure shall be implemented by 2015.	Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners.	Monitoring and Reporting: LAHD Environmental Management and Engineering

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
		Divisions
MM TRANS-2: Alameda Street and Anaheim Street Provide an additional eastbound through-lane on Anaheim Street. This measure shall be implemented by 2015.	Timing: Prior to 2015. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
MM TRANS-3: John S. Gibson Boulevard and I-110 NB Ramps Provide an additional southbound and westbound right-turn lane on John S. Gibson Boulevard and I-110 NB ramps. Reconfigure the eastbound approach to one eastbound through-left-turn lane, and one eastbound through-right-turn lane. Provide an additional westbound right-turn lane with westbound right-turn overlap phasing. This measure shall be implemented by 2015.	Timing: Prior to 2015. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
MM TRANS-4: Fries Avenue and Harry Bridges Boulevard Provide an additional westbound through-lane on Harry Bridges Boulevard. Provide an additional northbound, eastbound, and westbound right-turn lane on Fries Avenue and Harry Bridges Boulevard. This measure shall be implemented by 2015.	Timing: Prior to 2015. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
MM TRANS-5: Broad Avenue and Harry Bridges Boulevard Provide an additional eastbound and westbound left-turn lane on Harry Bridges Boulevard. This measure shall be implemented by 2015.	Timing: Prior to 2015. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
MM TRANS-6: Navy Way and Seaside Avenue Provide an additional eastbound through-lane on Seaside Avenue. Reconfigure	Timing: Prior to 2015. Methods: This measure shall be completed by the	Implementation: LAHD Monitoring and Reporting:

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
the westbound approach to one left-turn lane and three through-lanes. This measure shall be implemented by 2030.	LAHD, with compliance reported to the Board of Harbor Commissioners	LAHD Environmental Management and Engineering Divisions
TRANS-7: Avalon Boulevard and Harry Bridges Boulevard Add dual eastbound left-turn lanes and provide an additional eastbound throughlane on Harry Bridges Boulevard. Provide an additional westbound throughlane on Harry Bridges Boulevard. This measure shall be implemented by 2015	Timing: Prior to 2015. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
TRANS-8: Harbor Boulevard and SR-47 WB On-Ramp Provide an additional southbound through-lane on Harbor Boulevard. This measure shall be implemented by 2030	Timing: Prior to 2030. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
TRANS-9: Harbor Boulevard and Swinford Street Provide an additional northbound through-lane on Harbor Boulevard. This measure shall be implemented by 2015.	Timing: Prior to 2015. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
TRANS-10: John S. Gibson Boulevard and I-110 NB Ramps Add dual westbound left-turn lanes and provide overlap phasing for westbound right-turn lane. Provide additional southbound through-lane on John S. Gibson Boulevard. Provide additional eastbound through-lane on I-110 NB ramp. Provide free right-turn phasing for northbound right-turn lane. This measure shall be implemented by 2045	Timing: Prior to 2045. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
TRANS-11: Figueroa Street and C Street/I-110 Ramps Provide an additional eastbound through-lane on I-110 ramps. Provide triple westbound left-turn lanes on C Street. This measure shall be implemented by 2045.	Timing: Prior to 2045. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
TRANS-12: Pacific Avenue and Front Street Add dual northbound left-turn lanes on Pacific Avenue. This measure shall be implemented by 2045.	Timing: Prior to 2045. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
TRANS-13: Neptune Avenue and Harry Bridges Boulevard Provide an additional eastbound through-lane on Harry Bridges Boulevard. This measure shall be implemented by 2030	Timing: Prior to 2030. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
TRANS-14: John S. Gibson Boulevard and Channel Street Add dual northbound left-turn lanes on John S. Gibson Boulevard. This measure shall be implemented by 2015.	Timing: Prior to 2045. Methods: This measure shall be completed by the LAHD, with compliance reported to the Board of Harbor Commissioners	Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management and Engineering Divisions
Groundwater and Soils: Construction		
GW-1: Site Remediation Unless otherwise authorized by the lead regulatory agency for any given site, LAHD shall remediate all encountered contaminated soils or contamination	Timing: Prior to or during grading activities	Implementation: LAHD through Construction Contractor; China Shipping

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
within the excavation zones on the Project site boundaries prior to or during subsurface construction activities. Remediation shall occur in compliance with local, state, and federal regulations, as described in Section 3.7.3, and as directed by the Los Angeles Fire Department, DTSC, and/or RWQCB. Soil remediation shall be completed such that contamination levels in subsurface excavations are below health screening levels established by OEHHA and/or applicable action levels established by the lead regulatory agency with jurisdiction over the site. Only clean soil would be used as backfill. Soil contamination waivers may be acceptable as a result of encapsulation (i.e., paving) in backland areas and/or risk-based soil assessments but would be subject to the discretion of the lead regulatory agency. Excavated contaminated soil shall not be placed in another location onsite; it must be properly disposed of offsite. All imported soil to be used as backfill in excavated areas should be sampled to ensure that the soil is free of contamination. Existing groundwater contamination throughout the proposed Project boundary shall continue to be monitored and remediated as encountered, simultaneous and/or subsequent to site development, and/or in accordance with direction provided by the RWQCB. Unless otherwise authorized by the lead regulatory agency for any given site, areas of excavation with soil contamination that shall be remediated prior to, or in conjunction with, Project construction.	Method: Soil and groundwater remediation shall be completed such that contamination levels are below health screening levels established by OEHHA and/or applicable action levels established by the lead regulatory agency with jurisdiction over the site. Soil contamination waivers may be acceptable as a result of encapsulation (i.e., paving) and/or risk-based soil assessments, but would be subject to the discretion of the lead regulatory agency.	should tenant undertake soil disturbing construction activities. Monitoring and Reporting: Environmental Management Division, Construction Management Division, Engineering Division, Real Estate Division. Environmental Management Division will conduct independent soil sampling as appropriate.
Noise: Construction		
 MM NOI-1: Construction Limitations a) Construction Hours. Limit construction hours. b) Construction Days. Do no conduct noise-generating construction activities on weekends or holidays unless critical c) Temporary Noise Barriers. Should be located between noise-generating construction activities and sensitive receivers. 	Timing: Throughout all construction phases. Methods: This measure shall be incorporated into contract specifications for all construction work to reduce noise the impacts. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction

Table 2-1. Continued

Mitigation Measure		Timing and Methods	Responsible Parties
d) e) f) g) h) i)	Properly muffle and maintain all construction equipment powered by internal combustion engines. Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise-sensitive areas. Equipment Location. Locate all stationary noise-generating Quiet Equipment Selection. Select quiet construction equipment whenever possible. Comply with City of Los Angeles Noise Ordinance. Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing. IHC Hydrohammer. The contractor shall use an IHC Hydrohammer pile driver or equivalent when constructing the berths. Reporting. The Port shall clearly post the telephone number where complaints regarding construction-related disturbance can be reported.	construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications. The construction contractor shall ensure that the proposed pile driving equipment and measures are used during construction. The LAHD shall evaluate the contractor proposals with regard to reducing pile driving noise. The LAHD would subsequently perform periodic inspections to ensure that the approved equipment and methods are being followed and to monitor the noise levels for compliance with the proposed noise levels.	Management Division
Noise:	Operation		
MM NOI-2: Noise Walls Mitigation measures to reduce operational impacts would include installation of noise walls at the project site or residential property lines, if feasible, and/or soundproofing of impacted noise-sensitive structures.		Timing: Prior Phase III operation . Method: The LAHD should incorporate noise walls into the proposed Project plans.	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division
Public	Services and Utilities: Construction		

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
PS-1: Recycling Construction Materials Demolition and/or excess construction materials shall be separated onsite for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials shall be provided onsite.	Timing: Throughout construction Phases II and III. Methods: This measure shall be incorporated into contract specifications for all construction work to improve recycling efforts. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager to ensure compliance with contract specifications.	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division
PS-2: Materials with Recycled Content Materials with recycled content shall be used in Project construction. Chippers onsite during construction shall be used to further reduce excess wood for landscaping cover.	Timing: Throughout construction Phases II and III. Methods: This measure shall be incorporated into contract specifications for all construction work to improve recycling efforts. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager to ensure compliance with contract specifications.	
Public Services and Utilities: Operation		
PS-3: Long Term Solid Waste Management To ensure adequate long-term solid waste management, the proposed Project will be required to comply with policies and standards set forth in the City's Solid Waste Integrated Resources Plan (SWIRP) following 2025.	Timing: Throughout operational Phases II and III. Methods: This measure shall be incorporated into tenant's lease to improve recycling efforts. The contractor(s) shall submit an Environmental Compliance Plan for review and approval by LAHD prior to beginning of any construction activity. The contractor shall adhere to these specifications and	Implementation: China Shipping t Monitoring and Reporting: Environmental Management Division, Construction Management Division

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties	
	Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project/construction manager to ensure compliance with contract specifications.		