

FINAL MITIGATION MONITORING AND REPORTING PROGRAM

Berths 212–224 (YTI) Container Terminal Improvements Project

Environmental Impact Report (EIR) APP # 130204-020 / SCH # 2013041017

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Contents

Chapter 1 Mitigation Monitoring and Reporting Program	1-1
1.1 Introduction.....	1-1
1.2 Proposed Project Overview	1-1
1.3 Project Purpose.....	1-2
1.3.1 CEQA Objectives	1-2
1.3.2 NEPA Purpose and Need.....	1-3
1.4 Proposed Project Elements.....	1-4
1.4.1 Terminal Improvements.....	1-4
1.5 Project Phasing and Construction Plan.....	1-7
1.6 Monitoring and Reporting Procedures.....	1-9
1.7 Mitigation Monitoring and Reporting Program Implementation	1-9
Chapter 2 Mitigation Monitoring and Reporting Program Summary	2-1

List of Tables

1-1	YTI Terminal Proposed Crane Modifications and Replacements.....	1-6
1-2	Estimated Construction Phasing and Schedule	1-8
2-1	Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project.....	2-1

Acronyms and Abbreviations

AMP	Alternative Maritime Power
BACT	Best Available Control Technology
BMPs	Best Management Practices
CAAP	Clean Air Action Plan
CARB	California Air Resources Board
CDF	confined disposal facility
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cy	cubic yards
dBA	A-weighted decibels
EIR	Environmental Impact Report
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ESI	Environmental Ship Index Program
LAHD	Los Angeles Harbor Department
LAHD/EMD	LAHD Environmental Management Division's
mg/kg	milligrams per kilogram
MLLW	mean lower low water
MMRP	mitigation monitoring and reporting program
nm	nautical miles
OCPs	organochlorine pesticides
OSHA	Occupational Safety and Health and Administration
PCB	polychlorinated biphenyl
PRC	Public Resources Code
SCAQMD	South Coast Air Quality Management District
TEUs	twenty-foot equivalent units
TICTF	Terminal Island Container Transfer Facility
TPH	total petroleum hydrocarbons
TSCA	Toxic Substances Control Act
VOCs	volatile organic compounds
VSRP	Vessel Speed Reduction Program
YTI	Yusen Terminals, Incorporated

Chapter 1

Mitigation Monitoring and Reporting Program

1.1 Introduction

Section 21081.6 of the California Public Resources Code (PRC) 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 Environmental Impact Report (EIR) or a negative declaration, identifies measures to reduce potential adverse environmental impacts that those measures are implemented as detailed in the environmental document. As lead agency for Berths 212–224 Yusen Terminals, Incorporated (YTI) Container Terminal Improvements Project (proposed Project), 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 proposed 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 that a monitoring strategy was prepared for each mitigation measure identified in the proposed 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, and real estate entitlements). 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 Section 1.7, Mitigation Monitoring and Reporting Program Implementation.

1.2 Proposed Project Overview

The proposed project site is at 701 New Dock Street on Terminal Island, within an industrial area in the vicinity of the East Basin and Turning Basin in Los Angeles Harbor (Figure 2-2 in the Draft EIS/EIR). The site is generally bounded on the north by confluence of the Cerritos and East Basin Channels, on the east by SA Recycling at Berths 210–211, on the south by Seaside Avenue and SR-47, and on the west by the East Basin Channel. The site is within the Port of Los Angeles Community Plan area of the City of Los Angeles, which is adjacent to the communities of San Pedro and Wilmington. The proposed project site encompasses a total of approximately 185 acres, including the YTI Terminal and a portion of the Terminal Island Container Transfer Facility (TICTF)

(Figure 2-3 in the Draft EIS/EIR). The berths and container yard occupy approximately 157 acres, YTI's portion of the TICTF on-dock rail is approximately 24 acres, and an additional 4 acres are unused.

YTI plans to exercise an option to extend its lease through 2026. The proposed project horizon year is 2026, the final year of the extended lease. The terminal consists of two operating berths, Berths 212–213 and Berths 214–216, and one non-operating berth, Berths 217–220. Physical improvements proposed at the existing YTI Terminal include dredging and installing sheet piles¹ and king piles² at Berths 214–216 and Berths 217–220, adding and replacing/extending wharf gantry cranes, extending the 100-foot gauge crane rail along the wharf deck to Berths 217–220, improving/repairing backlands across the entire site, and adding a new operational rail track within the existing TICTF on-dock rail yard. All improvements would occur within the existing boundaries of the YTI Terminal. The proposed Project does not include physical improvements at Berths 221–224 except for resurfacing of backland areas. Improvements at Berths 212–213 would be limited to raising the height and extending the booms of cranes, and resurfacing backland areas. All dredged material would be disposed of at an approved site, such as the LA-2 Ocean Dredged Material Disposal Site (LA-2), the Berths 243–245 confined disposal facility (CDF), or another approved location. After construction, the terminal would have three operating berths. These improvements would enable the terminal to accommodate the projected fleet mix of larger container ships (up to 13,000 twenty-foot equivalent units [TEUs]) that are anticipated to call at the terminal through 2026, and would increase the capacity of the terminal from 1,692,000 TEUs to 1,913,000 TEUs annually.

1.3 Project Purpose

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

1.3.1 CEQA Objectives

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

¹ Sheet piles are used in earth retention and excavation support to retain soil, using steel sheet sections with interlocking edges, and are installed in sequence along a planned excavation perimeter or seawall alignment. The interlocked sheet piles form a wall for lateral earth support.

² King piles are steel, wide-flange H-beam piles that are driven into the soil, and provide structural support for the installation of sheet piles.

To meet the proposed project objective, the following more detailed objectives need to be met:

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

1.3.2 NEPA Purpose and Need

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

The proposed Project is needed for several reasons, primarily related to projected increases in the size of vessels in the fleet mix throughout the life of the proposed Project. Forecasts show that vessel fleets calling at the YTI Terminal will include larger vessels (up to 13,000 TEUs). The existing berths that would be upgraded as part of the proposed Project are currently dredged to -45 feet Mean Lower Low Water (MLLW)³ and are not deep enough to accommodate the projected fleet mix through 2026. The deepest existing berth can only accommodate 8,500 TEU vessels. In addition to depth restrictions, the majority of the existing cranes and crane infrastructure cannot accommodate the larger vessels. The existing 50-foot gauge crane rail at Berths 217–220 is not of sufficient size or gauge to accommodate the type and size of cranes capable of efficiently loading and unloading the existing fleet mix calling at the terminal or the larger container ships expected to call through 2026. Currently, all operating cranes have a 100-foot width between the rails. A temporary 100-foot gauge rail extends partially onto Berths 217–220 to allow cranes to be moved out of the way for storage, but the temporary crane rail lacks the structural integrity to support operating cranes. Only 4 of the existing 14 cranes

³ Mean Lower Low Water is the average height of the lowest tide recorded at a tide station each day during the recording period.

at the terminal are tall enough and have an outreach long enough to load and off-load the largest vessels anticipated to call at the terminal. Also, the TICTF on-dock rail yard at the YTI Terminal does not have the capacity to efficiently accommodate an increase in peak container volumes associated with larger container ships calling at the terminal. Consequently, an additional operational rail track is needed. Finally, the YTI Terminal container yard backlands are deteriorating and in need of repair and strengthening to prevent further damage to equipment and pavement throughout the life of the proposed Project.

1.4 Proposed Project Elements

The proposed Project would be constructed in two phases over an approximately 22-month schedule, expected to begin in mid-2015. Phase I is expected to last approximately 12 months and would consist of deepening Berths 217–220 (including installation of sheet piles), extending the 100-foot gauge crane rail, expanding the TICTF, relocating two Port-owned cranes, relocating and realigning two YTI cranes, delivering and installing up to four new cranes, raising and extending up to six YTI cranes, and conducting backland surface improvements. Phase II is expected to take approximately 10 months and would involve deepening Berths 214–216 (including installation of king piles and sheet piles) and conducting backland surface improvements. No physical changes would occur at Berths 221–224 except for paving work in the backland area. The improvements to Berths 217–220, including the extension of the 100-foot gauge crane rail, would add a new operating berth at the YTI Terminal (currently at two operating berths, three after implementation of the proposed Project). Below is a summary of the improvements that would occur at the terminal, with more detailed descriptions following.

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

1.4.1 Terminal Improvements

1.4.1.1 Dredging and Pilings

The proposed improvements to Berths 214–216 include: (1) dredging to increase the depth from -45 to -53 feet mean lower low water (MLLW) (with an additional 2 feet of overdredge depth, for a total depth of -55 feet MLLW); and (2) installing sheet piles and king piles to accommodate the dredging activities and help to support and stabilize the existing wharf structure. Dredging would remove approximately 21,000 cubic yards (cy) of sediment from the berth. The king piles would be installed approximately 35 feet below the mudline and the sheet piles would be installed 15 feet below the mudline, across approximately 1,400 linear feet along the berth (Figure 2-8 in the Draft EIS/EIR).

The proposed improvements at Berths 217–220 would include dredging to increase the depth from -45 to -47 feet MLLW (with an additional two feet of overdredge depth, for a total depth of -49 feet MLLW). Dredging would require the removal of approximately 6,000 cy of sediment. Sheet piles would be installed approximately 15 feet below the mudline and across approximately 1,200 linear feet along the berth (Figure 2-9 in the Draft EIS/EIR).

All of the dredged material, approximately 27,000 cubic yards, would be disposed of at an approved site, which may include LA-2, the Berths 243–245 CDF, or another approved location. A sediment characterization study was performed at Berths 212–224 in 2013 to determine the suitability of sediments from the proposed dredge footprint for unconfined aquatic disposal (AMEC 2013). Testing indicated that the majority of sediments within the Berths 212–224 footprint complied with the chemistry, toxicity, and bioaccumulation suitability requirements for ocean disposal (Title 40 Code of Federal Regulations [CFR] Parts 220–228), with some higher levels associated with unconsolidated surface (top-layer) sediments at Berths 214–216. Therefore, the majority of dredged material (21,800 cubic yards) would be suitable for placement at LA-2.

1.4.1.2 Crane Extension/Replacement

Currently there are 10 operating cranes (14 cranes total) at the terminal. Under the proposed Project, there would be up to 14 operating cranes and two non-operating cranes. The proposed Project includes raising and increasing the outreach of some of the existing wharf cranes and replacing some existing cranes with super post-Panamax cranes⁴. The four existing largest super post-Panamax cranes (cranes 5–8) would remain and would not be modified. Up to six existing cranes (cranes 1–4 and 9–10) would be raised, and the booms would be extended to match the size of the four largest cranes (197 feet) to accommodate loading and unloading of 22-container-wide cargo vessels. A maximum of four new super post-Panamax cranes would be added to replace smaller cranes at the YTI Terminal. The existing non-operating cranes (cranes 11–12) would be moved to the far end of Berths 217–220 and stored for non-use. Additionally, the existing non-operating cranes owned by the Port (cranes P18–P19) would be relocated off site. Table 1-1 summarizes the proposed modifications to the cranes at the terminal. The crane locations identified on Table 1-1 are reasonably likely locations that have been assumed for the purposes of performing a visual analysis; however, the cranes are designed to move along the wharves and would be located where needed to efficiently load and unload vessels.

⁴ Super post-Panamax refers to the largest modern container cranes that are used for vessels of about 22 or more containers wide (too large/wide to pass through the Panama Canal), and can weigh 1600–2000 metric tons. Currently, the Panama Canal can only handle vessels up to about 5,000 TEUs, and after the expansion (to be operational in 2015) it will be able to handle vessels of cargo capacity up to 13,000 TEUs.

Table 1-1: YTI Terminal Proposed Crane Modifications and Replacements

Crane Number	Existing		Proposed	
	Maximum Outreach	Containers Wide	Maximum Outreach	Containers Wide
1	153'	17	197'	22
2	153'	17	197'	22
3	180'	20	197'	22
4	180'	20	197'	22
5	197'	22	197'	22
6	197'	22	197'	22
7	197'	22	197'	22
8	197'	22	197'	22
9	145'	16	197'	22
10	145'	16	197'	22
11*	145'	16	145'*	16
12*	145'	16	145'*	16
P18*	110' 3"	13	N/A	N/A
P19*	110' 3"	13	N/A	N/A
New	N/A	N/A	197'	22
New	N/A	N/A	197'	22
New	N/A	N/A	197'	22
New	N/A	N/A	197'	22

Note:

* Non-operating crane

1.4.1.3 Extension of Wharf Crane Rail

The existing 100-foot gauge landside crane rail at Berths 212–216 would be extended by approximately 1,500 feet to accommodate 100-foot gauge cranes at Berths 217–220. Approximately 1,500 linear feet of existing 1,000 amp crane bus bar⁵ would be replaced with a new 1,500 amp system to provide power to the 100-foot gauge cranes.

1.4.1.4 Backland Improvements

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

⁵ A bus bar is a strip or bar of copper, brass, or aluminum that conducts electricity. At the YTI Terminal, a bus bar extends along the water-side edge of the wharf to conduct electricity for the gantry cranes that move up and down the wharf, and is protected from accidental contact by a metal enclosure.

1.4.1.5 TICTF Improvements

Expansion of the TICTF on-dock railyard would include the addition of a single 3,200-linear-foot operational rail loading track, including two turnouts, and reconstruction of a portion of the container terminal backlands to accommodate the rail expansion. These improvements would involve grading, paving, lighting, drainage, utility relocation/modifications, striping, relocation of an existing fence, and third-party utility modifications, relocations, or removals, as needed. The relocation of the fence would move approximately 5 acres from the YTI Terminal backlands to the TICTF.

1.5 Project Phasing and Construction Plan

The proposed Project would be constructed in two phases: Phase I is expected to take approximately 12 months beginning in mid-2015, and Phase II is expected to take approximately 10 months beginning in mid-2016. During Phase I of construction, Berths 212–213 and Berths 214–216 would remain in operation. During Phase II of construction, Berths 212–213 and the newly improved Berths 217–220 would be in operation. Table 1-2 shows the estimated construction phasing and schedule. In order to ensure that peak construction emissions are estimated, the schedule assumes that all of the work on the cranes to be modified and replaced would take place during the 22-month construction period. It is possible that some of the cranes would not be modified or replaced until a later date.

Table 1-2: Estimated Construction Phasing and Schedule

Phase	Months																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Phase I: Berths 217–220 Dredging and Pile Installation, Crane Rail Extension, TICTF Expansion, Backland Improvements																						
Mobilization/Prep/Coordination	█																					
Sheet Pile Installation				█	█	█	█	█														
Dredging: Ocean Disposal ¹								█														
Dredging: Upland Disposal ¹									█													
Crane Rail Extension		█	█	█																		
LAHD Crane Relocation																						
YTI Crane Relocation/Realignment								█														
New Crane Delivery								█	█	█	█	█	█	█								
Crane Height Raising and Boom Ext								█	█	█	█	█	█	█								
Concrete Runway		█																				
Cold Plane and Asphalt Concrete Overlay			█	█																		
Slurry Seal				█																		
Striping			█																			
TICTF Expansion								█	█	█	█											
Phase II: Berths 214–216 Dredging and Pile Installation, Backland Improvements																						
Sheet and King Pile Installation											█	█	█	█	█	█	█					
Dredging: Ocean Disposal ¹																	█	█				
Dredging: Upland Disposal ¹																						
Slurry Seal										█												
Striping																		█	█			
Final Inspection/Project Closeout																				█	█	█

Note:

¹ Options for either ocean disposal or upland disposal are mutually exclusive.

1.6 Monitoring and Reporting Procedures

Mitigation measures will be implemented in accordance with this MMRP. Lease measures and standard conditions have also been incorporated into this MMRP for reporting and tracking purposes. All applicable construction-related mitigation measures and standard conditions will be included in any bid specification released for construction of the proposed Project. Prior to release of bid specifications, construction plans will be provided to LAHD's Environmental Management Division (LAHD/EMD) for review and approval. Operational mitigation measures and lease measures will be incorporated into the lease through a lease amendment and will be monitored throughout operation by LAHD/EMD and any specified responsible parties designated by LAHD/EMD.

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

1.7 Mitigation Monitoring and Reporting Program Implementation

LAHD is responsible for administering the MMRP and ensuring that all parties comply with its provisions. The MMRP presented in Table 2-1 identifies each mitigation measure, lease measure, or standard condition by discipline and the entity (organization) responsible for its implementation. The methods for complying with the mitigation measures, timing, and reporting and documentation procedures are described in detail in Table 2-1.

Chapter 2

Mitigation Monitoring and Reporting Program Summary

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
3.2 Air Quality		
<p>MM AQ-1: Crane Delivery Ships Used during Construction. All ships and barges must comply with the expanded Vessel Speed Reduction Program (VSRP) of 12 knots between 20 nautical miles (nm) and 40 nm from Point Fermin.</p>	<p>Timing: During crane delivery. Methods: LAHD will include MM AQ-1 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM AQ-2: Harbor Craft Used during Construction. Harbor craft must use Tier 3 or cleaner engines.</p>	<p>Timing: Throughout construction. Methods: LAHD will include MM AQ-2 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p> <p>The 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:</p> <ul style="list-style-type: none"> • A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement. • 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. • 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 	<p>Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
	<p>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 equipment to avoid using uncontrolled equipment but no dealer within 200 miles of the project has the controlled equipment available for lease.</p>	
<p>MM AQ-3: Fleet Modernization for On-Road Trucks Used during Construction. Trucks with a gross vehicle weight rating of 19,500 or greater, including import haulers and earth movers, must comply with U.S. Environmental Protection Agency (EPA) 2010 on-road emission standards.</p>	<p>Timing: Throughout construction. Methods: LAHD will include MM AQ-3 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction. The 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:</p> <ul style="list-style-type: none"> • A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement. • 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. • 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. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using 	<p>Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
	uncontrolled equipment but no dealer within 200 miles of the project has the controlled equipment available for lease.	
<p>MM AQ-4: Fleet Modernization for Construction Equipment (except vessels, harbor craft, on-road trucks, and dredging equipment). All diesel-powered construction equipment greater than 50 horsepower must meet EPA Tier 4 off-road emission standards.</p>	<p>Timing: Throughout construction. Methods: LAHD will include MM AQ-4 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p> <p>The 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:</p> <ul style="list-style-type: none"> • A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement. • 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. • 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. 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. 	<p>Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

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Mitigation Measures	Timing and Methods	Responsible Parties
<p>MM AQ-5: Dredging Equipment. All dredging equipment must be electric.</p>	<p>Timing: During dredging. Methods: LAHD will include MM AQ-5 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM AQ-6: Construction Best Management Practices (BMPs). LAHD will implement BMPs, per LAHD Sustainable Construction Guidelines, to reduce air emissions from all LAHD-sponsored construction projects. The following measures are required for construction equipment, including on-road trucks used during construction:</p> <ul style="list-style-type: none"> • Use diesel oxidation catalysts and catalyzed diesel particulate traps. • Maintain equipment according to manufacturers’ specifications. • Restrict idling of construction equipment to a maximum of 5 minutes when not in use. • Install high-pressure fuel injectors on construction equipment vehicles. <p>LAHD will implement a process by which to select additional BMPs to further reduce air emissions during construction. LAHD will determine the BMPs once the contractor identifies and secures a final equipment list. Because the effectiveness of this measure has not been established and includes some emission reduction technology that may already be incorporated into equipment as part of the Tier level requirement in MM AQ-3 and MM AQ-4, it is not quantified in this study.</p>	<p>Timing: Throughout construction. Methods: LAHD will include MM AQ-6 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

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Mitigation Measures	Timing and Methods	Responsible Parties
<p>MM AQ-7: Additional Fugitive Dust Controls. Contractor must adhere to the following control measures, at a minimum:</p> <ul style="list-style-type: none"> • Active grading sites shall be watered at intervals of 2 hours. • Traffic speeds on all unpaved roads must be limited to 15 mph or less. • Contractors shall apply approved non-toxic chemical soil stabilizers to all inactive construction areas or replace groundcover in disturbed areas. • Contractors shall provide temporary wind fencing around sites being graded or cleared. • Trucks hauling dirt, sand, or gravel shall be covered or shall maintain at least 2 feet of freeboard in accordance with Section 23114 of the California Vehicle Code (“Spilling Loads on Highways”). • 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 winds exceed 25 mph or when visible dust plumes emanate from a site, and disturbed areas shall be stabilized if construction is delayed. • Open storage piles (greater than 3 feet tall and a total surface area of 150 square feet) shall be covered with a plastic tarp or chemical dust suppressant. • Materials shall be stabilized while loading, unloading, and transporting to reduce fugitive dust emissions. • Belly-dump truck seals shall be checked regularly to remove trapped rocks to prevent possible spillage. 	<p>Timing: Throughout construction. Methods: LAHD will include MM AQ-7 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
<ul style="list-style-type: none"> Track-out regulations shall be followed and water shall be provided while loading and unloading to reduce visible dust plumes. Waste materials shall be hauled off site immediately. 		
<p>MM AQ-8. General Mitigation Measure. For any of the above mitigation measures (MM AQ-2 through MM AQ-7), if a California Air Resources Board (CARB)-certified technology becomes available and is shown to be as good as, or better than, the existing measure in terms of emissions performance, the technology could replace the existing measure pending approval by LAHD. Measures will be set at the time a specific construction contract is advertised for bid.</p>	<p>Timing: Throughout construction. Methods: LAHD will include MM AQ-8 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Engineering and Construction Contractors Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM AQ-9. Vessel Speed Reduction Program (VSRP). Starting January 1, 2017 and thereafter, 95% of ships calling at the YTI Terminal will be required to comply with the expanded VSRP at 12 knots between 40 nm from Point Fermin and the Precautionary Area.</p>	<p>Timing: Throughout operation. Methods: LAHD will include MM AQ-9 in lease agreement with tenant. LAHD will monitor implementation of mitigation measures during operation.</p>	<p>Implementation: LAHD and YTI Monitoring and Reporting: Environmental Management Division</p>
<p>MM AQ-10. Alternative Maritime Power (AMP). By 2026, NYK Line-operated ships calling at the YTI Terminal will use AMP for 95% of total hoteling hours while hoteling at the Port.</p>	<p>Timing: Throughout operation. Methods: LAHD will include MM AQ-10 in lease agreement with tenant. LAHD will monitor implementation of mitigation measures during operation.</p>	<p>Implementation: LAHD and YTI Monitoring and Reporting: Environmental Management Division</p>
<p>LM AQ-1. Periodic Review of New Technology and Regulations. LAHD will require the tenant to review any LAHD-identified or other new emissions-reduction technology, determine whether the technology is feasible, and report to LAHD. Such technology feasibility reviews will take place at the time of LAHD's consideration of any lease amendment or facility modification for the YTI Terminal (Standard Tenant Feasibility Review). If the</p>	<p>Timing: Throughout operation. Methods: LAHD will include LM AQ-1 in lease agreement with tenant. LAHD will monitor implementation of lease measures during operation.</p>	<p>Implementation: LAHD and YTI Monitoring and Reporting: Environmental Management Division</p>

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Project

Mitigation Measures	Timing and Methods	Responsible Party
<p>technology identified in the Standard Tenant Feasibility Review is determined by LAHD to be feasible in terms of financial, technical and operational feasibility, the tenant will work with LAHD to implement such technology.</p> <p>In addition to Standard Tenant Feasibility Review described above, and as partial consideration for the lease amendment, the tenant and LAHD will:</p> <p>(i) Commencing on December 31, 2017, and continuing not less frequently than once every two years thereafter (Expedited Feasibility Review), investigate and report to the Los Angeles Board of Harbor Commissioners on: (a) the feasibility of zero emissions and near-zero emissions technologies for truck, yard equipment and rail activities; and (b) the feasibility of technologies to reduce emissions from vessels berthed at terminals that are not able to utilize AMP; and</p> <p>(ii) Review and report to the Los Angeles Board of Harbor Commissioners on the feasibility of any other new technology advancements that may reduce emissions not less frequently than once every five years following the effective date of the lease amendment (Periodic Feasibility Review).</p> <p>If either the Expedited Feasibility Review or the Periodic Feasibility Review demonstrates the new technology will be effective in reducing emissions and is determined by the Los Angeles Board of Harbor Commissioners to be feasible, including but not limited to from a financial, technical and operational perspective, tenant will implement the new air quality technological advancements, subject to mutual agreement on operational feasibility and cost sharing, which will not be unreasonably withheld. The effectiveness of this measure depends on the advancement of new technologies and the outcome of future feasibility or pilot studies.</p>		

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
LM AQ-2. Substitution of New Technology by Tenant. If any kind of technology becomes available and is shown to be as good as or better than the existing measure in terms of emissions reduction performance, the technology could replace the requirements of MM AQ-9 and MM AQ-10, pending approval by LAHD.	Timing: Throughout operation. Methods: LAHD will include LM AQ-2 in lease agreement with tenant. LAHD will monitor implementation of lease measures during operation.	Implementation: LAHD and YTI Monitoring and Reporting: Environmental Management Division, Engineering Division, Construction Management Division
LM AQ-3: Container Ship Engine Emissions Reduction Technology Improvements. The tenant will encourage NYK Line to determine the feasibility of incorporating all emission reduction technology and/or design options for vessels calling at the YTI Terminal.	Timing: Throughout operation. Methods: LAHD will include LM AQ-3 in lease agreement with tenant. LAHD will monitor implementation of lease measures during operation.	Implementation: LAHD and YTI Monitoring and Reporting: Environmental Management Division
LM AQ-4: Zero or Near-Zero Emissions Demonstration Project. The tenant will participate in a demonstration project lasting three years to investigate the feasibility of using two zero emission or near-zero emission yard tractors on the YTI Terminal. LAHD shall provide the equipment to be tested and any necessary infrastructure, including charging stations, as part of the project.	Timing: Three years during operation. Methods: LAHD will include LM AQ-4 in lease agreement with tenant. LAHD will monitor implementation of lease measures during operation.	Implementation: LAHD and YTI Monitoring and Reporting: Environmental Management Division
3.3 Biological Resources		
MM BIO-1: Avoid marine mammals. Although it is expected that marine mammals will voluntarily move away from the area at the commencement of the vibratory or “soft start” of pile-driving activities, as a precautionary measure, pile-driving activities occurring as part of the sheet pile and king pile installation will include establishment of a safety zone, and the area surrounding the operations will be monitored for pinnipeds and cetaceans by a qualified marine mammal observer. A 300-meter-radius safety zone will be established around the pile-driving site and monitored for marine mammals. The pile-driving site will move with each new pile, therefore the 300-meter safety zone will move	Timing: During pile driving. Methods: LAHD will include MM BIO-1 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.	Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
<p>accordingly.</p> <p>Prior to commencement of pile driving, observers on shore or by boat will survey the safety zone to ensure that no marine mammals are seen within the zone before pile driving of a pile segment begins. If a marine mammal is observed within 10 meters of pile-driving operations, pile driving will be delayed until the marine mammal moves out of the 10-meter zone. If a marine mammal in the 300-meter safety zone is observed, but more than 10 meters away, the contractor will wait at least 15 minutes to commence pile driving. If the marine mammal has not left the 300-meter safety zone after 15 minutes, pile driving can commence with a “soft start.” This 15-minute criterion is based on a study indicating that pinnipeds dive for a mean time of 0.50 to 3.33 minutes; the 15-minute delay will allow a more than sufficient period of observation to be reasonably sure the animal has left the proposed project vicinity.</p> <p>If marine mammals enter the safety zone after pile driving of a segment has begun, pile driving will continue. The qualified observer will monitor and record the species and number of individuals observed, and make note of their behavior patterns. If the animal appears distressed, and if it is operationally safe to do so, pile driving will cease until the animal leaves the area. Prior to the initiation of each new pile-driving episode, the area will again be thoroughly surveyed by the qualified observer.</p>		
3.4 Cultural Resources		
<p>SC CR-1: Stop Work in the Area if Prehistoric and/or Archaeological Resources are Encountered. In the unlikely event that any prehistoric artifact of historic period materials or bone, shell, or nonnative stone is encountered during construction, work shall be immediately stopped, the</p>	<p>Timing: Throughout construction. Methods: LAHD will include SC CR-1 in the contract specifications for construction and will retain a qualified archaeologist to evaluate any potential finds. LAHD will monitor implementation of</p>	<p>Implementation: LAHD through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management</p>

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project

Mitigation Measures	Timing and Methods	Responsible Parties
<p>area secured, and work relocated to another area until the materials can be assessed by a qualified archaeologist. Examples of such cultural materials might include historical trash pits containing bottles and/or ceramics; or structural remains or concentrations of grinding stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; and flakes of stone not consistent with the immediate geology such as obsidian or fused shale. The contractor shall stop construction within 30 feet of the exposure of these finds until a qualified archaeologist can be retained by LAHD to evaluate the find (see 36 CFR 800.11.1 and 14 CCR 15064.5(f)). If the resources are found to be significant, they shall be avoided or shall be mitigated consistent with Section 106 or State Historic Preservation Officer Guidelines.</p>	<p>mitigation measures during construction.</p>	<p>Division</p>

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
3.6 Greenhouse Gas Emissions		
MM GHG-1: Energy Audit. The tenant will conduct an energy audit by a third party of its choice every five years and install innovative power-saving technology (1) where it is feasible and (2) where the amount of savings would be reasonably sufficient to cover the costs of implementation.	Timing: Throughout operation. Methods: LAHD will include MM GHG-1 in lease agreement with tenant. LAHD will monitor implementation of mitigation measures during operation.	Implementation: LAHD and YTI. Monitoring and Reporting: Environmental Management Division
MM GHG-2: LED Lighting. When existing light bulbs require replacement, all bulbs within the interior of buildings on the premises will be replaced exclusively with LED light bulbs or a technology with similar energy-saving capabilities for ambient lighting within all terminal buildings. The tenant will also maintain and replace any Port-supplied LED light bulbs.	Timing: Throughout operation. Methods: LAHD will include MM GHG-2 in lease agreement with tenant. LAHD will monitor implementation of mitigation measures during operation.	Implementation: LAHD and YTI. Monitoring and Reporting: Environmental Management Division
MM GHG-3: Recycling. The tenant will ensure that a minimum of 60% of all waste generated in all terminal buildings is recycled by 2017.	Timing: Throughout operation. Methods: LAHD will include MM GHG-3 in lease agreement with tenant. LAHD will monitor implementation of mitigation measures during operation.	Implementation: LAHD and YTI. Monitoring and Reporting: Environmental Management Division
MM GHG-4: Carbon Offsets for Certain GHG Emissions. YTI shall purchase carbon offsets from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by CARB) for a total of 16,380 metric tons of GHG emissions associated with electricity usage for certain terminal operations (Required Offsets) by the year 2026. Alternatively, if LAHD identifies local projects or establishes a local GHG emission reduction funding program, YTI may contribute funding equivalent to the cost of the Required Offsets to such local projects or funding program.	Timing: By the year 2026. Methods: LAHD will require MM GHG-4 in the tenant lease during operation. LAHD will monitor implementation of mitigation measures during operation.	Implementation: YTI. Monitoring and Reporting: Environmental Management Division

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
3.8 Groundwater and Soils		
<p>MM GW-1: Soil Sampling, Testing, and Treatment. The following actions must be implemented by LAHD or its contractors:</p> <p>a) Prior to conducting excavations or disturbing the site cap in the former National Metals and Steel site, the former Al Larson’s Boat site, and the former Hugo Neu Proler lease site, EPA must receive a “Notification of Activity” according to Federal protocol under the Toxic Substances Control Act (TSCA) for former polychlorinated biphenyl (PCB) remediation sites. In place (in-situ) soil sampling for PCBs must be completed prior to excavation and the analytical results provided to the EPA for review, prior to excavation. The sampling, analytical method, extraction, and soil disposal methods must comply with EPA TSCA regulations for PCB remediation sites where the original source of the PCBs was greater than 50 milligrams per kilogram (mg/kg). Sampling frequency and depth must be consistent with established EPA sampling procedures or guidance such as 40 CFR 761, Subpart N (40 CFR 761.260 et al.), or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site characterization guidance. PCB-containing waste soils must be disposed of and labeled as TSCA waste. EPA written concurrence with the notification is needed before excavation may proceed in former PCB remediation areas. In addition, as lead agency for PCBs, EPA may attach conditions to their concurrence, which must be followed. If excavation occurs in these soils, a site-specific health and safety plan (SSHSP) would be required to address worker safety.</p>	<p>Timing: Prior to and concurrent with construction. Methods: LAHD will include MM GW-1 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor. Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project

Mitigation Measures	Timing and Methods	Responsible Parties
<p>b) In the former National Metals Steel and Al Larson Boat sites, soils must also be tested in advance for total petroleum hydrocarbons (TPH) and Title 22 metals as a condition of remediation site closure by the Los Angeles County Fire Department, Health and Hazardous Materials Section to provide adequate information for construction waste characterization and/or worker safety hazard evaluations, prior to excavation. Based on past sampling, organochlorine pesticides (OCPs) should also be tested at the National Metals Steel and Al Larson Boat site, and Title 22 metals and TPH should be tested at the Hugo Neu Proler lease site. If direct truck loading or immediate soil reuse is desired at the National Metals Steel, Al Larson Boat, and former Hugo Neu Proler lease sites, testing of any other constituents necessary for proper disposal or soil reuse should also be performed prior to excavation.</p> <p>c) Soils in the former Golden West leasehold must be tested for TPH, benzene, toluene, ethyl benzene and xylenes, and polyaromatic hydrocarbons prior to disposal. This is due to elevated petroleum waste left in backfill soils at this site. In addition, any other constituent analyses needed by the disposal site or for soil reuse should be analyzed at the same time. If excavation occurs in these soils, an SSHSP would be required to address worker safety.</p> <p>d) Soils in the former Dow Chemical site must be tested for volatile organic compounds prior to disposal. This is because past sampling indicates carbon tetrachloride is present at concentrations above industrial limits and at a level not protective of construction workers. Other lower-level volatile organic compounds (VOCs) were also found and should also be tested. In addition, any</p>		

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
<p>other constituent analyses needed by the disposal site or for immediate reuse should be analyzed for at the same time. If excavation occurs in these soils, an SSHSP would be required to address worker safety.</p> <p>e) In Waste Discharge Order 90-045, the Los Angeles Regional Water Quality Control Board requires maintenance of the structural integrity of the site cap for the former Golden West site and the National Metals Steel/Al Larson Boat Shop site. The site cap is to be a minimum of a 21-inch layer of clean material, compacted according to civil engineering standards, and the top 7 inches of this layer are to be asphalt concrete pavement. Groundwater monitoring requirements were rescinded for this site due to the presence of this cap and 6 years of monitoring indicating that the cap was protecting the groundwater from remnant contaminants in site soils. EPA may also be concerned with the integrity of this cap over former PCB remediation areas. Therefore, if the cap is disturbed over these sites, including the Hugo Neu Proler lease site, stormwater should not be allowed to infiltrate the cap, and during normal operations, the integrity of the cap should be inspected and maintained. Any other EPA requirements should also be followed.</p>		
<p>MM GW-2: Contamination Contingency Plan. The following contingency plan will be implemented to address contamination discovered during demolition, grading, and construction.</p> <p>a) All trench excavation and filling operations will be observed for the presence of free petroleum products, chemicals, or contaminated soil. Soil suspected of contamination will be segregated from other soil. In the</p>	<p>Timing: Throughout construction. Methods: LAHD will include MM GW-2 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor. Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project

Mitigation Measures	Timing and Methods	Responsible Parties
<p>event soil suspected of contamination is encountered during construction, the contractor will notify LAHD’s environmental representative. LAHD will confirm the presence of the suspect material and direct the contractor to remove, stockpile or contain, and characterize the suspect material. Continued work at a contaminated site will require the approval of the LAHD Project Engineer.</p> <p>b) Excavation of VOC-impacted soil, or soil suspected of being impacted by VOCs based on historical site use, will require obtaining and complying with a South Coast Air Quality Management District Rule 1166 permit. For soil suspected to have carbon tetrachloride, a Photo Ionization Detector (PID) with an 11.7 eV lamp will be necessary to detect significant levels.</p> <p>c) The remedial option(s) selected will be dependent on a suite of criteria (including but not limited to types of chemical constituents, concentration of the chemicals, health and safety issues, time constraints, and cost) and will be determined on a site-specific basis. Both offsite and onsite remedial options may be evaluated.</p> <p>d) The extent of removal actions will be determined on a site-specific basis. At a minimum, the impacted area(s) within the boundaries of the construction area will be remediated to the satisfaction of LAHD and the lead regulatory agency for the site or action. The LAHD Project Manager overseeing removal actions will inform the contractor when the removal action is complete.</p> <p>e) Copies of hazardous waste manifests or other documents indicating the amount, nature, and disposition of such materials will be submitted to the LAHD Project Manager within 60 days of project completion.</p> <p>f) In the event that contaminated soil is encountered either</p>		

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project

Mitigation Measures	Timing and Methods	Responsible Parties
<p>prior to or during construction, all onsite personnel handling or working in the vicinity of the contaminated material must be trained in accordance with EPA and Occupational Safety and Health and Administration (OSHA) regulations for hazardous waste operations or demonstrate they have completed the appropriate training. Training must provide protective measures and practices to reduce or eliminate hazardous materials/waste hazards at the workplace.</p> <p>g) When impacted soil must be excavated, air monitoring will be conducted as appropriate for related emissions adjacent to the excavation.</p> <p>h) All excavations will be backfilled with structurally suitable fill material that is free from contamination per LAHD standards.</p> <p>i) Standard engineering controls and BMPs will be implemented while excavating impacted soils to minimize human exposure to potential contaminants. Engineering controls and construction BMPs will include but not be limited to the following:</p> <ul style="list-style-type: none"> • Contractor will water/mist soil as its being excavated and loaded onto transportation trucks. • Contractor will place any stockpiled soil in areas shielded from prevailing winds. • Contractor will cover the bottom of excavated areas with sheeting when work is not being performed. 		

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
3.12 Noise		
<p>MM NOI-1: Noise Reduction during Pile Driving. The contractor will be required to use a pile-driving system such as a Bruce hammer (with silencing kit); an IHC Hydrohammer, SC series (with a sound insulation system); or an equivalent silenced hammer that is capable of limiting maximum noise levels at 50 feet from the pile driver to 104 A-weighted decibels (dBA), or less, during installation of king piles and sheet piles.</p>	<p>Timing: During pile driving. Methods: LAHD will include MM NOI-1 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor. Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM NOI-2: Erect Temporary Noise Attenuation Barriers Adjacent to Pile-Driving Equipment or Employ Temporary Shields to the Pile-Driving Equipment, Where Necessary and Feasible. The need for and feasibility of noise attenuation barriers/curtains or pile driver shielding will be evaluated on a case-by-case basis by considering the distance to noise-sensitive receptors, the available space at the construction location, safety, and proposed project operations. The noise barriers/curtains will be installed directly around the pile-driving equipment to shield the line of sight from the nearest noise-sensitive receptor, where feasible. Because the equipment would be mostly on the water and pile drivers are high above the water surface, noise barriers may not be feasible or effective to provide sufficient noise reduction, depending on the construction sites and pile-driving activity and equipment specified for each site. Another alternative is to employ shields that are physically attached to the pile drivers. The pile driver shielding is more effective where considerable noise reduction is required.</p>	<p>Timing: During pile driving. Methods: LAHD will include MM NOI-2 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor. Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Mitigation Monitoring and Reporting Program Summary for the Berths 212–224 (YTI) Container Terminal Improvements Project		
Mitigation Measures	Timing and Methods	Responsible Parties
3.14 Utilities		
<p>MM UT-1: Recycling of Construction Materials. Demolition and/or excess construction materials will be separated on site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials will be provided on site.</p>	<p>Timing: Throughout construction. Methods: LAHD will include MM UT-1 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor. Monitoring and Reporting: Environmental Management Division, Construction Management Division.</p>
<p>MM UT-2: Materials with Recycled Content. Materials with recycled content will be used in project construction where feasible.</p>	<p>Timing: Pre-construction material planning and during construction. Methods: LAHD will include MM UT-2 in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</p>	<p>Implementation: LAHD through Construction Contractor. Monitoring and Reporting: Environmental Management Division, Construction Management Division.</p>