

Mitigation Monitoring and Reporting Program

Pacific L.A. Marine Terminal LLC Crude Oil Terminal Pacific Project

Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR)

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November 20, 2008

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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 Pacific L.A. Marine Terminal LLC Crude Oil Terminal Project, and pursuant to AB 3180, the Los Angeles Harbor Department (LAHD) is responsible for implementation of this MMRP.

A Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR) 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 Pacific L.A. Marine Terminal LLC Crude Oil 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 Pacific L.A. Marine Terminal LLC Crude Oil Terminal Project SEIS/SEIR. The Terminal is proposed to be developed and used as a marine oil terminal. The proposed Project includes a 30-year lease to the year 2040.

The applicant, Pacific Los Angeles Marine Terminal, LLC (PLAMT), proposes to develop a deep-water crude oil marine terminal offloading facility (Marine Terminal) on Face C of Pier 400; a tank farm site (Tank Farm Site 1) containing two transfer tanks, a surge tank, and a vessel fuel tank on Face D of Pier 400; a tank farm site (Tank Farm Site 2) on Terminal Island in the Port; pipelines that would connect the Marine Terminal to the tank farm facilities; and pipelines that would connect the tank farm facilities to both the ExxonMobil Southwest Terminal on Terminal Island and the Ultramar/Valero Refinery located north of the Terminal Island Freeway and south of Anaheim Street. The Marine Terminal would receive crude oil and partially refined crude oil (hereinafter referred to collectively as “crude oil”) on tanker vessels. In addition, the Marine Terminal would receive barges carrying Marine Gas Oil (MGO), a marine vessel fuel. The Marine Terminal would load MGO onto tanker vessels; this constitutes the only loading that would occur at the facility. Other than unloading of MGO to be used for tanker refueling, no finished petroleum products (gasoline, diesel fuel, jet fuel, etc.) would be received at the terminal. Nearly all of the proposed Project, excepting only small portions of the pipelines, would be built on land owned by the LAHD.

Existing Conditions

Regional Context

The Port is composed of 45 km (28 miles) of waterfront, approximately 300 commercial berths, and 3,035 hectares (7,500 acres) of land and water. The Port includes automobile, container, omni, lumber, and cruise ship terminals; liquid and dry bulk terminals; and 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

The proposed Project (marine terminal and tank farms) would be located on Pier 400 and Pier 300 in the Port. The Marine Terminal site and Tank Farm Sites 1 and 2 are in the Terminal Island/Seaward Extension Planning Area 9 of the Port (as identified in the Port Master Plan or PMP). Pier 400 is a man-made peninsula in the southeasterly portion of the Port, bordered on the east by the Port of Long Beach’s Outer Harbor and on the south and west by the Port’s Outer Harbor. The Pier 300 Container Terminal and the U.S. Coast Guard (USCG) Base and adjacent federal prison are located across the harbor waters to the north and west of Pier 400, respectively. The proposed Tank Farm Site 2 on Pier 300 is the area adjacent to the Seaside Avenue/Navy Way and Reeves Avenue/Navy Way intersections. Portions of the pipeline route, and the termini of the new pipelines at the Ultramar/Valero Refinery and connections into other Plains pipeline systems, would extend outside of Port-controlled property. Most of the portions outside the Port would be within property owned by the Ultramar/Valero refinery or within road or railway rights-of-way in the City of Los Angeles; a small portion would be within the City of Long Beach. PLAMT would acquire new entitlements or any amendments to existing entitlements, as needed, for pipelines that traverse off-Port areas.

Project Objectives

To establish and maximize the Port's crude oil handling efficiency and capacity, the following key Project objectives must be accomplished:

Construct a crude oil marine terminal capable of accommodating deep-draft VLCC tankers, i.e., tankers up to 325,000 DWT or 2,300,000-bbl capacity and construct associated infrastructure capacity that would efficiently accommodate a portion of the forecasted increases in demand for crude oil to be shipped to southern California by sea, while maximizing the use of deep-water facilities created for the purpose by the Deep-Draft Navigation Improvements Project and integrating into the Port's overall utilization of available shoreline. The project objective would be accomplished by:

- Providing needed crude oil marine terminal accessory buildings and structures to support efficient crude oil unloading and handling requirements;
- Providing unloading capabilities to promote direct transfer of crude oil from ship to pipeline; and
- Providing access to land-based tanks and new and existing pipeline systems to transport crude oil to refineries for processing.

Proposed Project

The three principal elements of the proposed Project are the marine terminal, the tank farms, and the pipelines. The two principal activities that would take place are: (1) construction of the Project and (2) operation of the Project. Elements common to all of the construction activities would include: testing and inspection, scheduling, labor force management, equipment and materials, staging and storage areas, equipment transportation, utility and services requirements, and demolition of existing structures.

Project operations would consist of four primary activities: tanker vessel operations, marine terminal operations, tank farm operations, and pipeline operations. Other elements of the Project specific to the operations phase would include: start-up procedures; emergency response procedures; and a number of common features such as site access and security, system control and safety features, storm water management, waste handling, lighting, and testing and inspection.

The proposed Project is expected to begin vessel-unloading operations in 2010 with the first full year of operations expected in 2011. In the operation phase, the proposed Project includes the unloading of tanker vessels at the Marine Terminal, the transfer of MGO between vessels docked at the Marine Terminal and the MGO tank at Tank Farm Site 1, the transfer of crude oil into the surge tank at Tank Farm Site 1 and storage tanks at Tank Farm Sites 1 and 2, and the transfer of crude oil via Proposed Pipeline Segments 1, 2a, 2b, 2c, 3, 4, and 5. The operation of equipment in each facility would be controlled by human operators and/or automatic control systems installed at each site.

Table 1. Proposed Project Land and Throughput Comparison¹

<i>Element</i>	<i>CEQA Baseline (2004)</i>	<i>Proposed Project (2010)</i>	<i>Proposed Project (2015)</i>	<i>Proposed Project (2025)</i>	<i>Proposed Project (2040)</i>
Marine Terminal Acreage	0	5.0 acres (2.0 ha)			
Total Tank Farm Acreage	0	48.8 acres (19.7 ha)	48.8 acres (19.7 ha)	48.8 acres (19.7 ha)	48.8 acres (19.7 ha)
Acreage for Administration Building near Tank Farm Site 2	0	1.1 acres (0.45 ha)	1.1 acres (0.45 ha)	1.1 acres (0.45 ha)	1.1 acres (0.45 ha)
Pig Launching Facility (Site A)	0	1.2 acres (0.5 ha)	1.2 acres (0.5 ha)	1.2 acres (0.5 ha)	1.2 acres (0.5 ha)
Alternate Pig Launching Facility (Site B)	0	0.61 acres (0.25 ha)	0.61 acres (0.25 ha)	0.61 acres (0.25 ha)	0.61 acres (0.25 ha)
Total Project Acreage ²	0	55.5 - 56.1 acres (22.5 - 22.7 ha)			
Tanker Calls	0	129 per year ³	147 per year ³	201 per year ³	201 per year ³
Average Crude Oil Throughput	0	350,000 bpd	500,000 bpd	677,000 bpd	677,000 bpd
Barge Calls	0	6	8	12	12
Crude Oil Storage Tanks	0	16	16	16	16
Crude Oil Tank Capacity	0	4.0 million bbl	4.0 million bbl	4.0 million bbl	4.0 million bbl
Employees	0	523 peak ⁴	48 ⁵	54 ⁵	54 ⁵
<p><i>Notes:</i></p> <p>bpd = barrels per day bbl = barrels ha = hectares</p> <ol style="list-style-type: none"> NEPA Baseline throughput activities for years 2004, 2010, 2015, 2025, and 2040 are described in Section 2.5.2.1 (No Federal Action/No Project Alternative) of the Draft SEIS/SEIR since, as explained in Section 1.5.5.1 and Section 2.6 of the Draft SEIS/SEIR, the NEPA Baseline is identical to the No Federal Action/No Project Alternative for this analysis. Total acreage would vary slightly depending on the location of the pig launching facility. See Section 1.2.2.3.3 for details. The number of tanker calls depends on crude oil supply sources and vessel availability; the estimate shown here is based upon projections of the world tanker fleet and terminal throughput from Baker & O'Brien (2007), and is the highest reasonably foreseeable number of tanker calls under the proposed Project. See Appendix D1 for detailed calculations used to derive the estimate. These highest reasonably foreseeable numbers are assumed in the impact analysis in this SEIS/SEIR in order to capture all potential impacts of the proposed Project. A higher proportion of large vessels carrying larger loads would mean fewer vessel calls per year. Note that an emissions cap would be imposed in the South Coast Air Quality Management District (SCAQMD) operating permit, as described in Section 3.2 Air Quality. The actual number of tanker calls per year would be limited to comply with the SCAQMD permit condition; however, this SEIS/SEIR does not incorporate this limitation (in order to capture all potential impacts of the proposed Project). The peak number shown represents peak employment during the construction phase (taking into account that operations would start in 2010 while construction is ongoing); see Section 1.2.4.3.1 for details. This peak level would occur for only a brief time period, if at all, but is the highest reasonably foreseeable number. The number of employees during operation of the proposed Project includes those employed or contracted by PLAMT as well as the estimated increase in tugboat and Port pilot crews due to increased vessel calls. Employment is higher in later years because of the higher number of vessel calls resulting in more tugboat and Port pilot crews, as well as the need for increased inspections and maintenance that start five to ten years after the start of operations. 					

Construction

The Marine Terminal, both tank farms, all pipelines, and all ancillary components would be completed within about 30 months of project approval. The construction project would not be divided into phases; all elements of the project would be built out simultaneously, although some would be completed before others.

Construction of the Marine Terminal would start approximately 3 months after approval of the proposed Project and would last for a period of approximately 16 months. Tank farm construction would start within a month of Project approval. Pipeline construction would start approximately three months after project approval and take approximately 15 months. The Marine Terminal, Tank Farm Site 1, the pipelines, and eight tanks on Tank Farm Site 2 would be completed within about 20 months from approval of the proposed Project, and the proposed Project would be ready to receive tanker vessels. Construction of the remaining six tanks on Tank Farm Site 2 would be completed about approximately ten months later. Thus, construction and operation would occur simultaneously for a period of approximately ten months.

During construction, property within and outside the project footprint would be used for various activities, including receipt of bulk materials by barge and rail, equipment laydown and staging areas, warehousing, construction worker parking, construction field office trailers, and pipeline construction material storage and equipment staging.

Marine Terminal Construction

The marine terminal at Berth 408 would be constructed using a combination of water-borne and landside equipment. Construction would include: site preparation; the installation of pilings and dolphins; fabrication of the unloading platforms and AMP and AMECS platforms, unloading arms, fendering system, trestles, roadways, pipeways, walkways, boat dock, and gangway tower; installation of the cargo and davit cranes, the spill boom storage facility, the firefighting system, lighting systems, cathodic protection systems, and navigational lighting systems; fabrication of the control systems, and construction of the buildings, utilities, fencing, paving, and lighting. No dredging or filling would be necessary.

The pilings supporting the berth platform structure, the AMP platform, the AMECS platform, and the mooring dolphins, would be installed by barge-mounted cranes and a pile driver, maneuvered by a tugboat and supported by small workboats. Pilings would likely be delivered by barge. The steel, concrete, piping, and other building materials needed for the platform structures, control buildings, fencing, lighting, utilities, and the AMP or AMECS infrastructure would be delivered by heavy-duty trucks or rail cars, and concrete trucks would deliver concrete. Welding-unit trucks would be needed to support the assembly of equipment and piping. Mechanical components such as electrical gear, pumps, control units, treatment system components, light standards, valves, etc. would be delivered by trucks and assembled into their respective systems on site. Asphalt trucks and specialized paving machinery would install the roadways and parking lots. Excavators and backhoes would be used to prepare the site for foundations, roadbed, and footings, and dump trucks would haul excess soil off site. Most of this equipment would be diesel-powered.

Tank Farm Construction

Construction of the tank farms would include site preparation, installation of stone columns (made from compacted gravel) for support under the tanks, construction of the containment berms and drainage systems, construction of the control buildings and assembly of the control systems, construction of roads and parking areas, fabrication of the tanks themselves, and installation of valves, manifolds, piping, utilities, lighting, fencing, and security systems.

Construction would require the use of excavators and backhoes, dump trucks, cranes, forklifts, paving equipment, and welding units. Steel plates, piping, building materials, control and monitoring equipment, pumps, and other elements would be delivered by heavy-duty trucks or rail cars, asphalt by specialized trucks, and cement by cement trucks. Most of this equipment would be diesel-powered.

Pipeline Construction

Conventional trenching would be used to install the pipelines on Pier 400, across Navy Way, through the Customs House parking lot, and at the pig launching area. In other locations, boring and drilling would be the primary method of placing the pipelines underground. Construction would require the use of excavators, hoes, dump trucks, welding trucks, cement trucks, and specialized drilling equipment. Piping and other materials would be delivered by heavy-duty haul trucks or rail cars and offloaded by cranes and fork lifts. Most of this equipment would be diesel-powered.

System inspection of the completed pipelines would include hydrostatic testing to check for pipeline leakage and to confirm that the pipe, fittings, and welded sections can maintain mechanical integrity without failure or leak under pressure, as required by DOT. The tests would involve filling the pipelines with water under pressures higher than the maximum allowable operating pressure for at least 8 hours. Following the test, the water would either be transferred to the next pipeline section or discharged into an existing storm drain with the prior approval of the LARWQCB.

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

<i>Applicable Statutes, Plans, Policies, and Other Regulatory Requirements</i>	<i>Description</i>
FEDERAL	
Coastal Zone Management Act (CZMA)	Section 307 of the 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 SEIS/SEIR for Project approval; and USACE will use this approval as a demonstration that the Project is in compliance with the CZMA.
Biological Resources	Endangered Species Act of 1973, as amended; Marine Mammal Protection Act; Migratory

Protection	Bird Conservation Act; Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972; U.S. Fish and Wildlife Act of 1956 (16 USC 742a et seq.); Fish and Wildlife Coordination Act (16 USE 661 et seq.); Magnuson-Stevens Fishery Conservation and Management Act, as amended through 1996; Executive Order 13112, Invasive Species; Non-indigenous 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, USACE will use this SEIS/SEIR and resource evaluation studies to consult or coordinate with the California State Office of Historic Preservation (SHPO) regarding the determination that the proposed Project area may or may not affect cultural resources listed or eligible for listing on the National Register of Historic Places.
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.
Environmental Justice	Executive Order 12898 requires that "to the greatest extent practicable...each federal agency shall make achieving environmental justice part of its missions 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.
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; Sections 401 and 402 of the Clean Water Act of 1977; and the Marine Protection, Research, and Sanctuaries Act of 1972, Section 103.
Transportation Regulations	Federal Highway Administration Guidelines; Federal Aid Highway Program Manual 7-7-3; USACE Regulation 1105-2-100; National Environmental Compliance, 91-190; U.S. Coast Guard Regulations Pertaining to Navigation Safety and Waterfront Facilities; NEPA of 1969 as Amended (Public Law 91-190).
STATE	
California Coastal Act of 1976	The Coastal Act (PRC Div. 20 Section 30700 <i>et seq.</i>) identifies the Port 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 construction necessary facilities to accommodate deep-draft vessels and to accommodate the demands of foreign and domestic waterborne commerce and other traditional and water dependent and related facilities in order 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 shall be for developments which 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 (Chapter 8), water areas may be diked, filled, or dredged when consistent with a certified port master plan only for specific purposes, including the following: (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.

California Coastal Plan	Under provisions of the California Coastal Act of 1976, the Port Master Plan (PMP) is incorporated into the Local Coastal Program of the City of Los Angeles. The PMP has been approved by the Los Angeles Board of Harbor Commissioners and has been certified by the California Coastal Commission (CCC). Under provisions of the California Coastal Act of 1976, the PMP is incorporated into the Local Coastal Program (LCP) of the City of Los Angeles. Therefore, if the proposed Project is consistent with the PMP, it would also be considered consistent with the LCP.
California Tidelands Trust Act, 1911	Submerged lands and tidelands within the Port, 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. The Port jurisdictional properties are held in trust by the City and administered by the City's Harbor Department (i.e., 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 Los Angeles Harbor Department will fund the Project with trust revenues. All property and improvements included in the Project would be dedicated to maritime-related uses and, therefore, would be dedicated to uses consistent with the Trust.
Water Quality Control Policy - Enclosed Bays and Estuaries of California	In 1974, the State Water Resources Control Board (SWRCB) adopted a water quality control policy that provides principles and guidelines to prevent degradation, and to 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, 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 LARWQCB, among other requirements, must be consistent with this policy.
California Toxics Rule	This rule, as found in 40 CFR Part 131, establishes numeric criteria for priority toxic pollutants in inland waters as well as enclosed bays and estuaries.
Global Warming Solutions Act (AB 32)	Passed in 2006, AB 32 requires that the State of California reduce its GHG emissions to 1990 levels by the year 2020 through the establishment of a statewide emissions cap achieved through regulations to be developed by the CARB.
STATE (CONTINUED)	
CARB Emission Reduction Plan for Ports and Goods Movement in California	The Plan seeks to reduce emissions from port activities by 60-80% (depending on the pollutant) by the year 2020 through the continuation of existing regulatory programs and the development and application of new regulations targeting oceangoing vessels (fuel standards, speed reduction, shore power), harbor craft (engine upgrades), cargo-handling equipment (exhaust controls), trucks (modernization program), and locomotives (exhaust controls, fuel standards, and alternative technologies). The Plan also emphasizes project-level mitigation measures to achieve emissions reduction and improve public health.
Air Quality Regulations	California Clean Air Act; Air Quality Management Plan of the City of Los Angeles General Plan, Air Quality Element; and South Coast Air Quality Management District (SCAQMD) Regulations IX (Standards of Performance for New Stationary Sources) and XIII (New Source Review) and Rules 201, 203, 403, 466, 1142, 1173, 1178, 1303, and 1306; AB 32 (Greenhouse Gas Regulation); the Congestion Management Plan; and the CARB Emission Reduction Plan for Ports and Goods Movement.
State Implementation Plan (SIP)	The federal Clean Air Act (CAA) and its subsequent amendments establish the 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 NAAQS will be met 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.
Air Quality Management Plan (AQMP)	The United States Environmental Protection Agency (USEPA), under the provisions of the Clean Air Act, requires each state that has not attained the National Ambient Air Quality Standards (NAAQS) to prepare a separate local plan detailing how these standards would be met in each local area, and once met, how they would be maintained. These Air Quality Attainment or Management Plans (AQAP or AQMP) are prepared by local agencies designated by the governor of each state to be incorporated into a State Implementation Plan (SIP). The Lewis Air Quality Act of 1976 established the four-county SCAQMD and mandated a planning process requiring preparation of an Air Quality Management Plan (AQMP). Every 3

	<p>years, SCAQMD prepares an overall plan for air quality improvement. Each iteration of the plan is an update of the previous plan and has a 20-year horizon. The 2007 AQMP was adopted by the SCAQMD Governing Board on June 1, 2007. The 2007 AQMP updates the attainment demonstration for the federal standards for ozone and particulate matter with a diameter of less than 10 micrometers (PM₁₀), provides a basis for a maintenance plan for the federal carbon monoxide (CO) standard for the future, and updates the maintenance plan for the federal nitrogen dioxide (NO₂) standard that SCAB has achieved since 1992.</p> <p>This 2007 revision to the AQMP addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The 2007 AQMP is consistent with, and builds upon, the approaches taken in the prior AQMP and amendments to the Ozone SIP for SCAB attainment of the federal ozone air quality standard. This revision points to the urgent need for additional emission reductions beyond those incorporated in the 2003 Plan from all sources, specifically those under the jurisdiction of the CARB and USEPA, which account for approximately 80 percent of the ozone precursor emissions in the basin.</p>
Transportation Regulations and Policies	California Public Utilities Commission Guidelines; California Transportation Guidelines; California Administrative Code Section 65302 (f)-Noise Element.
LOCAL	
Southern California Association of Governments (SCAG) Regional Plans	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 Regional Comprehensive Plan and Guide (RCPG), the 2004 Regional Transportation Plan (RTP) and, in cooperation with SCAQMD, the AQMP. The Project would not generate population migration into the area or create a demand for new housing units. As a result, it would be consistent with the RCPG and the Regional Housing Needs Assessment.
Water Quality Control Plan - Los Angeles River Basin	The <i>Water Quality Control Plan for the Los Angeles River Basin (Region 4)</i> (Basin Plan) was adopted by the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) in 1978 and updated in 1994 (LARWQCB 1994). The Basin Plan designates beneficial uses of water resources in the basin. The Basin Plan describes water quality objectives, implementation plans, and surveillance programs to protect or restore designated beneficial uses. The proposed Project would be permitted by the LARWQCB and operated in conformance with objectives of the Water Quality Control Plan.
City of Los Angeles: Port of Los Angeles Plan	The Port of Los Angeles Plan is part of the <i>General Plan of the City of Los Angeles</i> (General Plan) (City of Los Angeles 1982). 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 PMP. The long-range preferred water and land uses for the Port include non-hazardous liquid and non-hazardous dry bulk cargo, general cargo, commercial fishing operations, and Port-related commercial and industrial uses. However, these preferred goals are subject to the following criteria: changes in economic conditions that affect the types of commodities traded in waterborne commerce; the economic life of existing facilities handling or storing hazardous cargo; and precautions deemed necessary to maintain national security (LAHD 2006).
Port of Los Angeles Master Plan (PMP) and PMP Roadmap	<p>Port Master Plan. The PMP (LAHD 2006) provides for the development, expansion, and alteration of the Port, in both short-term and long-term periods, 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 Project land uses would be consistent with those prescribed by the PMP as discussed in Section 3.8.</p> <p>Roadmap. The PMP is mandated by the California Coastal Act and provides for the development, expansion, and alteration of the Port, in both short-term and long-term periods, for commerce, navigation, fisheries, Port-dependent activities, and general public recreation. The PMP is also the planning document on which to base all project-specific CEQA documents. The PMP is undergoing comprehensive update. The Port expects to begin working its Strategic Plan update first. The port would first begin a comprehensive outreach effort before beginning the actual update. Based on stakeholder feedback, Port-wide studies, growth projections and Port Policy, a draft plan will be crafted, which will then be analyzed under CEQA through an EIR. After CEQA review, the plan will then be finalized. The entire process is expected to take approximately 2½ to 3 years.</p>

San Pedro Bay Ports Clean Air Action Plan (CAAP)	The CAAP is a joint program of the ports of Los Angeles and Long Beach to achieve accelerated emissions reductions from port activities through a combination of measures targeting ships, trucks, trains, and terminal operations. The measures will be imposed through a combination of tariff provisions, lease requirements, incentive programs, and CEQA mitigation requirements. Details of the CAAP are provided in Section 1.6 and Section 3.2.
Greenhouse Gas (GHG) Inventory	In response to a proposal by the Attorney General of the State of California, the Port has agreed to conduct an inventory of greenhouse gas emissions from port activities.
Port of Los Angeles Leasing Policy	The Port Leasing Policy sets forth requirements for tenants regarding environmental protection and emissions reductions. (See Appendix E, Section E.6, for details of specific provisions from the Port Leasing Policy that would apply to this proposed Project.)
LOCAL (CONTINUED)	
Port of Los Angeles Risk Management Plan (RMP)	The RMP, an amendment to the PMP, was adopted in 1983, per requirements of the CCC. The purpose of the RMP 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 RMP provides guidance for future development of the Port to minimize or eliminate the hazards to vulnerable resources from accidental releases (LAHD 1983). Upon concurrence with these findings by the Los Angeles Fire Department, and implementation of, and adherence to, the physical and operational characteristics described in project applications, leases, and environmental documents, a proposed project would be consistent with the RMP. This consistency is achieved through physical separation of facilities and materials, as well as facility design factors, safety barriers, fire protection, and other risk mitigation measures.
City of Los Angeles: Wilmington-Harbor City Community Plan	The <i>Wilmington-Harbor City Community Plan</i> (City of Los Angeles 1999b) is a part of the General Plan and provides an official guide to future development. The Project is located in an area south of Wilmington-Harbor City. Although the Community Plan does not include the Project area, the plan recommends integrating future development of the Port with the Wilmington community, including Port changes and land acquisitions. The plan also recommends interagency coordination in the planning and implementation of Port projects to facilitate efficiency in Port operations, and to serve the interests of the adjacent communities.
City of Los Angeles: San Pedro Community Plan	The <i>San Pedro Community Plan</i> (City of Los Angeles 1999a) is a part of the General Plan and provides an official guide to maintain the individuality of that community. The Project is located in an area east of San Pedro. Although the Community Plan does not include the Project area, the plan seeks to coordinate harbor related land uses and circulation systems at the Port with those of adjoining areas by providing adequate buffers and transitional uses between the harbor and the rest of the Community. To achieve this goal, the plan recommends developing an integrated relationship with the Port to improve the vitality of downtown San Pedro, World Cruise facilities, and Ports O' Call, coordinating with the Port for development of industrial space and activity, relocating hazardous uses away from the community, and improving vehicular access to the Port via the West Basin.
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 (see Section 1.6 of this document).

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 Pacific L.A. Marine Terminal LLC Crude Oil Terminal Project

Mitigation Measure	Timing and Methods	Responsible Parties
Air Quality and Meteorology: Construction		
<p>MM AQ-1: Ridesharing or Shuttle Service - Ridesharing or shuttle service programs shall be provided for construction workers.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM-AQ-2: Staging Areas and Parking Lots - On-site construction equipment staging areas and construction worker parking lots shall be located on either paved surfaces, or unpaved surfaces covered by gravel or subjected to soil stabilization treatments. The staging areas and worker parking lots shall be located as close as possible to public access routes. Access to public roadways from the staging areas and parking lots shall be controlled in order to minimize idling of Project construction equipment.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>MM AQ-3: Fleet Modernization for Construction Equipment. All off-road diesel-powered construction equipment greater than 50 hp, except derrick barges and marine vessels, shall meet the cleanest off-road diesel emission levels available but no greater than Tier 2 emission standards for projects starting construction prior to December 2011. Tier 3 emission standards shall be applied to projects starting construction between December 2011 and January 2015. The contractor could meet Tier 3 equivalent PM10 emission limits through the use of new or repowered engines designed to meet Tier 2 PM standards and/or the use of ARB approved diesel particulate traps. For Phase II construction (post 2014), equipment shall meet the Tier 4 emission standards where available. In addition, construction equipment shall incorporate, where feasible, emissions savings technology such as hybrid drives and specific fuel economy standards.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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.</p> <p>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:</p> <ol style="list-style-type: none"> 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 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 	<p>Implementation: LAHD through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division Construction Management</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	<p>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-4: Electricity Use - Electricity supplied by a public utility shall be used where available on the tank farm and pier construction sites in lieu of temporary diesel or gasoline-powered generators.</p>	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease and 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. The Port shall ensure electricity is available for compliance.</p>	<p>Implementation: Plains LLC through Construction Contractor and LAHD Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM AQ-5: Best Management Practices -. The following types of measures are required on construction equipment (including on-road trucks):</p> <ol style="list-style-type: none"> 1. Use of diesel oxidation catalysts and catalyzed diesel particulate traps 2. Maintain equipment according to manufacturers’ specifications 3. Restrict idling of construction equipment and on-road heavy-duty trucks to a maximum of 5 minutes when not in use 4. Install high-pressure fuel injectors on construction equipment vehicles 5. Maintain a minimum buffer zone of 300 meters between truck 	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor and LAHD Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>traffic and sensitive receptors</p> <ol style="list-style-type: none"> 6. Improve traffic flow by signal synchronization 7. Enforce truck parking restrictions 8. 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. 9. Re-route construction trucks away from congested streets or sensitive receptor areas 10. Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site. <p>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.</p>		
<p>MM AQ-6: Additional Fugitive Dust Controls - The construction contractor shall reduce fugitive dust emissions by 90 percent from uncontrolled levels¹. The Project construction contractor shall specify dust-control methods that will achieve this control level in a SCAQMD Rule 403 dust control plan. Their duties shall include holiday and weekend periods when work may not be in progress.</p> <ul style="list-style-type: none"> • Measures to reduce fugitive dust include, but are not limited to, the following: • 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 	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

¹ Fugitive dust emissions will be reduced 75 percent from uncontrolled emissions and then an additional 60 percent from unmitigated emissions.

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>being graded or cleared.</p> <ul style="list-style-type: none"> • 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. 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. • Require the use of electrified truck spaces for all truck parking or queuing areas. <p>The grading contractor shall suspend all soil disturbance activity when winds exceed 25 mph or when visible dust plumes emanate from a site; disturbed areas shall be stabilized if construction is delayed.</p>		
<p>MM AQ-7: Expanded VSR Program - All ships and barges used primarily to deliver construction-related materials to a LAHD-contractor construction site shall comply with the expanded Vessel Speed Reduction (VSR) Program of 12 knots from 40 nautical miles (nm) from Point Fermin to the Precautionary Area.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	oversight by the LAHD project/construction manager or designated building inspectors to ensure compliance with contract specifications.	
<p>MM AQ-8: Low Sulfur Fuel for Construction Delivery Vessels - All ships and barges used primarily to deliver construction-related materials to a LAHD-contractor construction site shall use low-sulfur fuel (maximum sulfur content of 0.2 percent) in main engines, auxiliary engines, and boilers within 40 nm of Point Fermin.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM AQ-9: Engine Standards for Harbor Craft Used in Construction – Prior to December 31, 2010, all harbor craft with C1 or C2 marine engines must achieve a minimum emission reduction equivalent to a U.S. Environmental Protection Agency (USEPA) Tier-2 2004 level off-road marine engine. From January 1, 2011 on, all harbor craft with C1 or C2 marine engines must utilize a USEPA Tier-3 engine, or cleaner.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>MM AQ-10: Fleet Modernization for On-Road Trucks – Prior to and including December 31, 2011: All on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used on-site or to transport materials to and from the site shall comply with USEPA 2004 on road emission standards for PM₁₀ and NO_x (0.10 g/bhp-hr PM₁₀ and 2.0 g/bhp-hr NO_x).</p> <p>From January 1, 2012 on: All on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used at the Port of Los Angeles shall comply with EPA 2007 on-road emission standards for PM₁₀ and NO_x (0.01 g/bhp-hr and 0.20 g/bhp-hr).</p> <p>All years: All on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used on-site or to transport materials to and from the site shall comply with USEPA 2004 on road emission standards for PM₁₀ and NO_x (0.10 g/bhp-hr PM₁₀ and 2.0 g/bhp-hr NO_x). Trucks hauling materials such as debris or fill shall be fully covered while in operation off Port property.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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.</p> <p>The truck 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> <ol style="list-style-type: none"> 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 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 	

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	<p>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-11: Special Precautions near Sensitive Sites - For construction activities that occur within 1,000 feet of sensitive receptors (defined as schools, playgrounds, daycares, and hospitals), the Port shall notify each of these sites in writing at least 30 days before construction activities begin.</p>	<p>Timing: Throughout all construction phases. Methods: LAHD shall notify sensitive receptors prior to construction.</p>	<p>Implementation: LAHD Monitoring and Reporting: Environmental Management Division, Real Estate</p>
<p>MM AQ-12 General Mitigation Measure - For any of the above mitigation measures (MM AQ-1 through AQ-11), 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.</p>	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease.</p>	<p>Implementation: Plains LLC and LAHD Monitoring and Reporting: Environmental Management Division, Real Estate, Construction Management Division</p>
<p>Deep Draft FEIS/FEIR MM 4G-5: Discontinue construction activities during a Stage II Smog Alert.</p>	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>MM AQ-22: 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):</p> <ul style="list-style-type: none"> • Sustainable Sites • Water Efficiency • Energy & Atmosphere • Materials & Resources • Indoor Environmental Quality • Innovation & Design Process <p>As a result, a LEED-certified building will be more energy efficient, thereby reducing GHG emissions compared to a conventional building design.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM AQ-23: Compact Fluorescent Light Bulbs</p> <p>All interior terminal building lighting shall use compact fluorescent light bulbs and the tenant shall maintain and replace all compact fluorescent bulbs.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>MM AQ-25: Solar Panels The applicant shall install solar panels on the administration building.</p>	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM AQ-27: Tree Planting The applicant shall plant shade trees around the administration building. All shade trees shall be maintained over the life of the project.</p>	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>Implementation: Plains LLC through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>Air Quality and Meteorology: Operation</p>		
<p>MM AQ-13: Expanded Vessel Speed Reduction (VSR) Program - All ships calling (100%) at Berth 408 shall comply with the expanded VSR Program of 12</p>	<p>Timing: Throughout all operational years. Methods: This measure shall be incorporated into the</p>	<p>Implementation: Plains and</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties																																																																				
<p>knots between 40 nm from Point Fermin and the Precautionary Area from Year 1 of operation</p>	<p>lease. Plains shall submit biannual compliance report documenting compliance to the Environmental Management Division. Environmental Management Division will independently monitor through monitoring data provided by the Marine Exchange. 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.</p>	<p>LAHD Monitoring and Reporting: Marine Exchange, LAHD Wharfingers, Environmental Management and Real Estate Divisions</p>																																																																				
<p>MM AQ-14: Low Sulfur Fuel Use in Main Engines, Auxiliary Engines, and Boilers – All ships (100%) calling at Berth 408 shall use 0.2% low sulfur fuel within 40 nm of Point Fermin on their outbound leg and while hotelling at the Project, beginning on day one of operation. Vessels calling at Berth 408 shall also use 0.2% low sulfur fuel within 40 nm of Point Fermin on their inbound leg, except where circumstances (such as ships with a mono-tank system or ships originating from a Port where low sulfur fuel is not available) make such use infeasible on the inbound leg. Regardless, the applicant shall adhere to the following annual phase-in schedule which identifies the minimum allowable annual percentage of vessels in the fleet calling at Berth 408 which shall use 0.2% low sulfur fuel within 40 nm of Point Fermin on their inbound leg.:</p> <table border="1" data-bbox="153 987 972 1312"> <thead> <tr> <th rowspan="3">Year</th> <th colspan="6">Main Engines/Auxiliary Engines/Boilers</th> </tr> <tr> <th colspan="3">Inbound</th> <th colspan="3">Hoteling and Outbound</th> </tr> <tr> <th>HFO</th> <th>0.50%</th> <th>0.20%</th> <th>HFO</th> <th>0.50%</th> <th>0.20%</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0</td> <td>100</td> <td>0</td> <td>0</td> <td>0</td> <td>100</td> </tr> <tr> <td>2</td> <td>0</td> <td>100</td> <td>0</td> <td>0</td> <td>0</td> <td>100</td> </tr> <tr> <td>3</td> <td>0</td> <td>100</td> <td>0</td> <td>0</td> <td>0</td> <td>100</td> </tr> <tr> <td>4</td> <td>0</td> <td>80</td> <td>20</td> <td>0</td> <td>0</td> <td>100</td> </tr> <tr> <td>5</td> <td>0</td> <td>50</td> <td>50</td> <td>0</td> <td>0</td> <td>100</td> </tr> <tr> <td>6</td> <td>0</td> <td>50</td> <td>50</td> <td>0</td> <td>0</td> <td>100</td> </tr> <tr> <td>7-30</td> <td>0</td> <td>10</td> <td>90</td> <td>0</td> <td>0</td> <td>100</td> </tr> </tbody> </table> <p>In addition, all callers carrying 0.2% low sulfur shall use 0.2% low sulfur within</p>	Year	Main Engines/Auxiliary Engines/Boilers						Inbound			Hoteling and Outbound			HFO	0.50%	0.20%	HFO	0.50%	0.20%	1	0	100	0	0	0	100	2	0	100	0	0	0	100	3	0	100	0	0	0	100	4	0	80	20	0	0	100	5	0	50	50	0	0	100	6	0	50	50	0	0	100	7-30	0	10	90	0	0	100	<p>Timing: Throughout all operational years. Methods: This measure shall be incorporated into the lease. Plains shall submit quarterly reporting forms documenting compliance to LAHD. Vessel calls shall be monitored by the Wharfingers Office and the Environmental management Division. 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.</p>	<p>Implementation: Plains and LAHD Monitoring and Reporting: LAHD Wharfingers, Environmental Management and Real Estate Divisions</p>
Year		Main Engines/Auxiliary Engines/Boilers																																																																				
		Inbound			Hoteling and Outbound																																																																	
	HFO	0.50%	0.20%	HFO	0.50%	0.20%																																																																
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6	0	50	50	0	0	100																																																																
7-30	0	10	90	0	0	100																																																																

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
40 nm of Point Fermin both on the inbound and outbound leg.		
<p>MM AQ-15: AMP – By the end of year 2 of operation, all ships capable of utilizing AMP and all frequent callers (2 or more a year) shall use AMP at the facility. At a minimum, ships calling at the Berth 408 facility shall use AMP while hoteling at the Port in the following minimum percentages:</p> <ul style="list-style-type: none"> • By end of year 2 of operation – 6 (4%) vessel calls • By end of year 3 of operation – 10% of annual vessel calls • By end of year 5 of operation – 15% of annual vessel calls \ • By end of year 10 of operation – 50% of annual vessel calls • By end of year 16 of operation – 80% of annual vessel calls 	<p>Timing: Throughout all operational years.</p> <p>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.</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Wharfingers, Environmental Management and Real Estate Divisions</p>
<p>MM AQ-16: Slide Valves - Ships calling at Berth 408 shall be equipped with slide valves or a slide valve equivalent (an engine retrofit device designed to reduce the sac volume in fuel valves of main engines in Category 3 marine engines) on main engines to the maximum extent possible</p>	<p>Timing: Throughout all operational years.</p> <p>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.</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions</p>
<p>MM AQ-17: Parking Configuration - Configure parking during operation to minimize traffic interference. Because the effectiveness of this measure cannot be predicted, it is not quantified in this study. This measure incorporates the requirements of MM 4G-14 from the 1992 Deep Draft FEIS/FEIR</p>	<p>Timing: Throughout all operational years.</p> <p>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.</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>MM AQ-18: New Vessel Builds - 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, CH₄, O₃, and CFCs). Design considerations and technology shall include, but is not limited to:</p> <ol style="list-style-type: none"> 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 8. Diesel-electric pod propulsion systems 	<p>Timing: Throughout all operational years.</p> <p>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.</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions</p>
<p>MM AQ-23: 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.</p>	<p>Timing: Throughout all operational years.</p> <p>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.</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>MM AQ-24: 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.</p>	<p>Timing: Throughout all operational years.</p> <p>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.</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions</p>
<p>MM AQ-26: Recycling. The terminal buildings shall achieve a minimum of 40 percent recycling by 2012 and 60 percent recycling by 2015. Recycled materials shall include:</p> <ul style="list-style-type: none"> • 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 	<p>Timing: Throughout all operational years.</p> <p>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.</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions</p>
<p>LEASE MEASURES: The following measures are lease measures that will be included in the lease for Berth 400 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</p>		
<p>MM AQ-19: Equivalent Measures – General Mitigation Measure. For any of the above mitigation measures (MM AQ-13 through AQ-18), if any kind of technology becomes available and is shown to be as good or as better in terms of emissions reduction performance than the existing measure, the technology could replace the existing measure pending approval by the Port of Los Angeles. The technology’s emissions reductions must be verifiable through USEPA,</p>	<p>Timing: Throughout all operational years.</p> <p>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 facility modification for the Plains property or every</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management and Real Estate</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>CARB, or other reputable certification and/or demonstration studies to the Port’s satisfaction. This measure is intended to provide PLAMT the flexibility to achieve required emissions mitigation using alternative methods that may not be apparent at present.</p> <p>The applicant may use an AMP alternative emission reduction technology so long as the alternative technology will achieve emission reductions equivalent to the emission reductions that would have been achieved through the use of AMP.</p>	<p>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.</p>	<p>Divisions</p>
<p>MM AQ-20: Periodic Review of New Technology and Regulations - The Port shall require the 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. If the technology is determined by the Port to be feasible in terms of cost, technical and operational feasibility, the tenant shall work with the Port to implement such technology at sole cost to the tenant.</p> <p>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. The effectiveness of this measure depends on the advancement of new technologies and the outcome of future feasibility or pilot studies. If the tenant requests future Project changes that would require environmental clearance and a lease amendment, future CAAP mitigation measures would be incorporated into the new lease at that time.</p> <p>As partial consideration for the Port's agreement to issue the permit to the tenant, 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 the parties mutual agreement on operational feasibility and cost sharing which shall not be unreasonably withheld.</p> <p>In addition, the Port shall require the tenant to evaluate the application of a AMECs or similar stack control technology within 5 years of project approval and implement such technology, pending separate CEQA analysis, if found to be feasible.</p>	<p>Timing: Throughout all operational years.</p> <p>Methods: This measure shall be incorporated into the lease. If the tenant proposes replacing any mitigation 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.</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Wharfingers, Environmental Management and Real Estate Divisions</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>MM AQ-21: Throughput Tracking - If the project exceeds project throughput assumptions / projections anticipated through the years 2010, 2015, 2025, or 2040, staff shall evaluate the effects of this on the emission sources (ship calls and crude oil throughput) relative to the SEIS/SEIR. If it is determined that these emission sources exceed SEIS/SEIR assumptions, staff would evaluate actual air emissions for comparison with the SEIS/SEIR and if the criteria pollutant emissions exceed those in the SEIS/SEIR, then new or additional mitigations would be applied through MM AQ-20.</p>	<p>Timing: Throughout all operational years.</p> <p>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, 2025 and 2040 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-19 and MMAQ-20.</p>	<p>Implementation: LAHD and Plains and LAHD</p> <p>Monitoring and Reporting: LAHD Wharfingers, Environmental Management and Real Estate Divisions</p>
<p>Biology: Construction</p>		
<p>MM BIO 1.1a: A qualified least tern biologist hired by the Port shall monitor the California least tern and other special status bird nesting during construction activities on Pier 400, including installation of Pipeline Segment 1 to Tank Farm Site 2 and use of staging area 412. Monitoring shall occur from 2 weeks prior to the nesting season start (April) to the end of the nesting season (September or when the last bird has vacated the site and no birds return for at least two weeks). Monitoring shall occur at a minimum of three days a week during the nesting season, which, for the least terns, generally extends from mid-May through the beginning of August. In the event of an imminent threat to nesting special status species, and the Construction Manager is not immediately available, the monitor shall have the authority to redirect construction activities. If construction activities need to be redirected to prevent impacts to special status birds, the monitor shall immediately contact the LAHD Environmental Management Division, Port Inspector, and Construction Manager. The Construction Manager has the authority to halt construction if determined to be necessary.</p>	<p>Timing: Throughout project Construction.</p> <p>Methods: This measure shall be the responsibility of the Environmental Management Division (EMD) and Engineering Division.</p>	<p>Implementation: LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management Division and Engineering Division.</p>
<p>MM BIO 1.1b At Tank Farm Site 1, no stone column construction shall occur</p>	<p>Timing: During stone column installation at Tank</p>	<p>Implementation: Plains LLC</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>at night (sunset to sunrise), and if possible, stone column construction during daytime hours should be conducted outside the least tern nesting season. If stone column installation is unavoidable during the nesting season, the work shall be phased so that installation nearest the nesting site is conducted prior to or after the nesting season, and a qualified biologist shall monitor the least terns at the nesting site during stone column installation to identify adverse reactions of the birds to this activity. If the terns react adversely to work at any of these sites, work will be temporarily stopped. The LAHD Environmental Management Division, least tern biologist, and Construction Manager shall confer with the USFWS and CDFG regarding necessary further actions.</p>	<p>Farm Site 1. Methods: This measure shall be incorporated into the Plains lease and 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.</p>	<p>through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM BIO 1.1c All construction activities that are within 200 ft (61 m) of the California least tern nesting site and foraging areas shall be scheduled to occur between September and March, unless otherwise approved by the USFWS and CDFG. This includes installation and removal of mooring piles as well as gravel delivery at staging area 412.</p>	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease and contract specifications for all construction work. The construction contractor shall be responsible for scheduling the construction activity during the allowed time periods and for instructing construction personnel on least tern sensitivity issues to be observed as part of normal construction procedures. LAHD shall perform periodic inspections to ensure the schedule is being followed.</p>	<p>Implementation: Plains LLC through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM BIO 1.1d The Port shall provide environmental training by a qualified biologist to all construction contractor personnel working at the site. This shall include, but not be limited to, information about the California least tern (e.g., seasonal presence, pictures of the birds, and regulatory protections) and other special status species (e.g., black skimmer and burrowing owl) and measures required to avoid or minimize the potential for impacts to these species. The latter measures shall include placement of food in sealed containers and daily disposal of all food wastes in sealed containers, with off-site disposal at regular intervals during construction; prohibition of pets or animals of any kind during work on Pier 400; limiting activities within 200 ft (61m), or other established buffer distance, of the nesting site from March through August, to the extent feasible; and scheduling construction activities that would be near the nesting</p>	<p>Timing: Prior to Construction. Methods: This measure shall be the responsibility of the Environmental Management Division (EMD) and Engineering Division.</p>	<p>Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management Division and Engineering Division.</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
site for the period between September and March.		
<p>MM BIO 1.1e: When California least terns are present at the nesting site, idle construction equipment and stockpiles of materials exceeding approximately 8 ft (2.4 m) in height shall be placed so they do not provide perches for birds that could prey on least terns.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and contract specifications for all construction work. The construction contractor shall instruct construction personnel on these requirements as part of normal construction procedures. LAHD shall perform periodic inspections to ensure these measures are being implemented</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM BIO 1.1f Night time construction at Tank Farm Site 1 and construction staging area 412 during the least tern nesting season should be avoided. All lighting (temporary and security) shall be directed away from the California least tern nesting site and shielded to minimize increased light in the nesting area.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and contract specifications for all construction work. The construction contractor shall instruct construction personnel on these requirements as part of normal construction procedures. LAHD shall perform periodic inspections to ensure these measures are being implemented.</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM BIO 1.1g Vegetation growing at Tank Farm Site 1 shall be cleared immediately prior to construction activities occurring from April through August to discourage and protect least terns and black skimmers from nesting within the work area. Areas cleared at other times of the year will not be left barren and vacant during the nesting season.</p>	<p>Timing: Prior to Construction.</p> <p>Methods: This measure shall be the responsibility of the Environmental Management Division (EMD) and Engineering Division.</p>	<p>Implementation: LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management Division and Engineering Division.</p>
<p>MM BIO 1.1h To avoid impacts to nesting special status species, such as the California least tern, black skimmer, and burrowing owl, a preconstruction survey shall be conducted by a qualified biologist if construction commences during the normal nesting season for most bird species (February 1 to August 1) to determine if any are nesting there.</p>	<p>Timing: Prior to Construction.</p> <p>Methods: This measure shall be the responsibility of the Environmental Management Division (EMD) and Engineering Division.</p>	<p>Implementation: LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management Division and</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>If any nesting is found, a buffer area of 200 ft (61 m) shall be established and protective measures shall be finalized in coordination with USFWS and CDFG (and the USACE for federally listed species). If any nesting is found, an initial buffer area of 200 ft (61 m) shall be established, and the biological monitor would work with the LAHD Environmental Management Division (EMD) and their CLT consultant, Port Inspector, and Construction Manager to ensure protection of the least terns while nesting. As appropriate, the USACE, USFWS, and CDFG would be consulted regarding the safe distance setback requirements. Nesting birds shall be protected until nesting is complete or young have fledged as determined by a qualified biologist.</p>		<p>Engineering Division.</p>
<p>MM BIO 1.1i During construction, no unauthorized vehicles or persons shall be allowed within 200 ft (61 m) of the east side and northeast corner of the least tern nesting site (the “at grade portion”) during the nesting season. Signs shall be posted, and barriers (e.g., temporary fencing) shall be provided if signage is not adequate</p>	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease and contract specifications for all construction work. The construction contractor shall instruct construction personnel on these requirements as part of normal construction procedures. LAHD shall perform periodic inspections to ensure these measures are being implemented.</p>	<p>Implementation: Plains LLC through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM BIO 1.1j Construction of the north-south oriented containment dikes at Tank Farm Site 1 should occur early in site development to aid as noise buffers during construction.</p>	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease and contract specifications for all construction work. The construction contractor shall instruct construction personnel on these requirements as part of normal construction procedures. LAHD shall perform periodic inspections to ensure these measures are being implemented.</p>	<p>Implementation: Plains LLC through Construction Contractor Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM BIO 1.1k 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</p>	<p>Timing: Throughout all construction phases. Methods: This measure shall be incorporated into the Plains lease and contract specifications for all construction work. The construction contractor shall instruct construction personnel on these requirements</p>	<p>Implementation: Plains LLC through Construction Contractor Monitoring and Reporting:</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>of each pile driving event, 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.</p> <p>In addition, a qualified biologist 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.</p>	<p>as part of normal construction procedures. LAHD shall perform periodic inspections to ensure these measures are being implemented.</p>	<p>Environmental Management Division, Construction Management Division</p>
<p>MM BIO 1.2a The portions of all structures (buildings, lights, etc.) at the proposed Tank Farm Site 1 on Pier 400 that have a direct line of sight to the least tern nesting site shall be designed to prevent birds from perching on them. The prevention measures cannot be specified at this time but shall be those approved by the USFWS at the time of installation (e.g., Nixalite currently used on high mast lights) and shall be monitored during the least tern nesting season to verify that predatory birds are not perching on proposed Project structures and to identify repairs needed to keep the measures in good working order. Any such repairs will be implemented immediately (i.e., within one day when least terns are present).</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease. The project applicant shall prepare and submit detailed plans for approval identifying prevention measures for all Pier 400 Tank Farm Site 1 structures. CDFG, USFWS, and LAHD shall review and approve these plans. LAHD shall arrange for the presence of the monitor during operations.</p>	<p>Implementation: Plains LLC through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
Biology: Operation		
<p>MM BIO-1.2b: Predator Control. A qualified biologist shall monitor Tank Farm Site 1 for predators during the least tern nesting season. Any predators found will be controlled in coordination with CDFG and USFWS.</p>	<p>Timing: Throughout all operational years.</p> <p>Methods: This measure shall be the responsibility of the Environmental Management Division (EMD) and Engineering Division.</p>	<p>Implementation: LAHD</p> <p>Monitoring and Reporting: LAHD Environmental Management Division and Engineering Division.</p>
<p>MM BIO-1.2c: Oil Spill Containment. If a project-related oil spill occurs during the least tern nesting season and has the potential to enter the Pier 300 Shallow Water Habitat, booms shall be deployed to prevent oil from entering this important foraging area. The applicant shall ensure quick deployment of oil</p>	<p>Timing: Throughout all operational years.</p> <p>Methods: This measure shall be incorporated into the lease. Biannual tenant compliance reports shall be</p>	<p>Implementation: Plains and LAHD</p> <p>Monitoring and Reporting:</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>booms at the south entrance of the Pier 300 Shallow Water Habitat or at the causeway gap bridge, either through storage of booms at the south entrance to the Pier 300 Shallow Water Habitat and at the causeway gap bridge or through deployment at these locations in accordance with the approved oil spill response plan.</p>	<p>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.</p>	<p>LAHD Environmental Management and Real Estate Divisions</p>
<p>MM BIO-1.2d: Security Lighting. Security lighting standards on the eastern side of Tank Farm Site 1 near the least tern nesting site shall be no greater than 30 ft (9.1 m) in height and directed away from the nesting site.</p>	<p>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.</p>	<p>Implementation: Plains and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions</p>
<p>MM BIO-1.2e: Operations Personnel Environmental Training. The Port shall provide environmental training by a qualified biologist to all operational workers at the PLAMT Pier 400 Marine Terminal and Tank Farm Site 1. This shall include, but not be limited to, information about the California least tern (e.g., seasonal presence, pictures of the birds, and regulatory protections) and measures required to avoid or minimize the potential for adverse effects to the species. The latter measure shall include placement of food in sealed containers and daily disposal of all food wastes in sealed containers, with off-site disposal at regular intervals; prohibition on bringing pets or animals of any kind to work on Pier 400; and scheduling significant maintenance/construction activities that would occur near the nesting site for the period between September and March.</p>	<p>Timing: Prior to Construction. Methods: This measure shall be the responsibility of the Environmental Management Division (EMD) and Engineering Division.</p>	<p>Implementation: LAHD Monitoring and Reporting: LAHD Environmental Management Division and Engineering Division.</p>
<p>MM BIO-1.2f: Vessel Speed Reduction Program. All ships calling (100 percent) at Berth 408 shall comply with the expanded VSR Program of 12 knots between 40 nm from Point Fermin and the Precautionary Area from Year 1 of operation.</p>	<p>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.</p>	<p>Implementation: Plains and LAHD Monitoring and Reporting: LAHD Environmental Management and Real Estate Divisions</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
Cultural Resources		
<p>MM CR-1a. 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 California Code of Regulations, Title 14, Section 15064.5(f)). 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; historic 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 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.</p> <p>If human remains are encountered, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Los Angeles County Coroner shall be contacted to determine the age and cause of death of the deceased. If the remains are not of Native American heritage, construction in the area may recommence. If the remains are of Native American origin, the most likely descendants of the deceased shall be identified by the NAHC. The Port and USACE shall consult with the Native American most likely descendant(s) to identify a mutually acceptable strategy for treating and disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. If the NAHC is unable to identify a most likely descendant, the descendant fails to make a recommendation within 24 hours of being notified by the NAHC, the Port, or the USACE and the descendant are not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods shall be reburied with appropriate dignity on the proposed Project site in a location not subject to further subsurface disturbance.</p>	<p>Timing: During Project Construction</p> <p>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.</p>	<p>Implementation: LAHD through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>a. Prior to beginning construction, the Port shall meet with applicable Native American Groups, including the Gabrieliño/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 in conjunction with the Native American Groups to establish the proper way of extracting and handling all artifacts and/or human remains in the event of an archaeological discovery.</p>		
Geological Resources		
<p>MM 4A-4: Seismic Design. The proposed terminal facilities would have the potential to experience severe seismically induced ground accelerations. Damage or injury shall be minimized through the appropriate seismic engineering design, based upon a site-specific geotechnical investigation.</p>	<p>Timing: Prior to construction and/or operation</p> <p>Methods: A site-specific geotechnical investigation shall be completed by a California-licensed geotechnical engineer and/or engineering geologist. The results shall be incorporated into the structural design of Project components.</p>	<p>Implementation: LAHD through Construction Contractor; Plains for design work</p> <p>Monitoring and Reporting: Environmental Management Division, Port Operations, Construction Management Division, Real Estate Division.</p>
<p>MM 4A-6: Minimization of Settlement. The proposed terminal facilities would have the potential to experience soil settlement as a result of construction on hydraulically-placed landfill material. Damage or injury shall be minimized through the appropriate structural design, based upon a site-specific geotechnical investigation.</p>	<p>Timing: Prior to construction and/or operation</p> <p>Methods: A site-specific geotechnical investigation shall be completed by a California-licensed geotechnical engineer and/or engineering geologist. The results shall be incorporated into the structural design of Project components.</p>	<p>Implementation: LAHD through Construction Contractor; Plains for design work</p> <p>Monitoring and Reporting: Environmental Management Division, Port Operations, Construction Management Division, Real Estate Division.</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>MM 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.</p>	<p>Timing: At beginning of Construction and within first year of Operation (with annual updates)</p> <p>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</p> <p>Method: Operations: General requirements of this measure shall be incorporated into the lease. Plains 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.</p>	<p>Implementation: LAHD through Construction Contractor; Plains and LAHD for operations.</p> <p>Monitoring and Reporting: Environmental Management Division, Port Operations, Construction Management Division, Real Estate Division.</p>
<p>Groundwater and Soils: Construction</p>		
<p>MM GW-1: Site Remediation. . Unless otherwise authorized by the lead regulatory agency for any given site, the LAHD shall remediate all contaminated soils or contamination within the excavation zones on the Project site boundaries prior to or during subsurface construction activities. Remediation shall also include suspected or known contamination within boundaries of the proposed Project that occurred as a result of leaks or spills on adjacent properties. 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 LARWQCB.</p>	<p>Timing: Prior to or during grading activities</p> <p>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</p>	<p>Implementation: LAHD through Construction Contractor; Plains should tenant undertake soil disturbing construction activities.</p> <p>Monitoring and Reporting: Environmental Management</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>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.</p> <p>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 LARWQCB.</p> <p>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.</p>	<p>the lead regulatory agency.</p>	<p>Division, Construction Management Division, Engineering Division, Real Estate Division. Environmental Management Division will conduct independent soil sampling as appropriate.</p>
<p>MM GW-2: Soil, Slurry, and Groundwater Characterization in Areas of Known Contamination The following sampling plan shall be implemented to address areas of known soil contamination during grading, trenching, HDD, and dewatering activities:</p> <ol style="list-style-type: none"> Excavated soil in areas of known contamination shall be systematically tested for contaminants, including but not limited to those listed in Table 3.7-1, for each project area. HDD drilling waste shall be systematically tested for contaminants, and if present, segregated from clean soils and slurry. The remedial option(s) of contaminated material shall be dependent upon a number of criteria (including but not limited to types of chemical constituents, concentration of the chemicals, health and safety issues, time constraints, cost, etc.) and shall be determined on a site-specific basis. On-site personnel handling or working in the vicinity of the contaminated material shall be trained in accordance with Occupational Safety and Health and Administration (OSHA) regulations for hazardous waste operations. These regulations are based on CFR 1910.120 (e) and 8 CCR 5192, which states that “general site workers” shall receive a minimum of 40 hours of classroom training and a minimum of three days of field training. This training provides precautions and protective measures to 	<p>Timing: Prior to or during grading, excavation, and construction activities</p> <p>Method: The Port shall confirm the presence of the suspect contaminated soil and direct the contractor to remove, stockpile, or contain the suspect material identified within the boundaries of the construction area. Contaminated sediments shall either be treated on-site or trucked off-site for disposal at a California licensed facility approved for disposal of such waste.</p> <p>Contaminated slurry shall be containerized, dewatered, and dried, pending remediation or off-site disposal. Contaminated groundwater, derived from the slurry dewatering process, shall be trucked off-site and disposed at a California licensed disposal facility.</p> <p>The remedial option(s) of contaminated material shall be dependent upon a number of criteria (including but not limited to types of chemical constituents, concentration of the chemicals, health and safety issues, time constraints, cost, etc.) and shall be</p>	<p>Implementation: LAHD through Construction Contractor; Plains should tenant undertake soil disturbing construction activities.</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division, Engineering Division, Real Estate Division. Environmental Management Division will conduct independent soil sampling as appropriate.</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>reduce or eliminate hazardous materials/waste hazards at the work place.</p> <p>e. Copies of hazardous waste manifests or other documents indicating the amount, nature, and disposition of such materials shall be submitted to the Chief Harbor Engineer within 30 days of soil/slurry sampling, remediation, and/or disposal. All excavations shall be filled with structurally suitable fill material which contains contaminant concentrations (if any) that are within permissible limits, as directed by the Los Angeles Fire Department, DTSC, and/or LARWQCB.</p> <p>f. All excavations shall be filled with structurally suitable fill material which contains contaminant concentrations (if any) that are within permissible limits, as directed by the Los Angeles Fire Department, DTSC, and/or LARWQCB.</p> <p>g. Any project-related dewatering activities shall either discharge into the sanitary sewer, under permit with the City of Los Angeles Sanitation Bureau, or comply with the NPDES permit regulations and an associated SWPPP regarding discharge into storm drains and/or directly into harbor waters. Such permit requirements typically include on-site treatment to remove pollutants prior to discharge. Effluent analyses should include, but not be limited to, contaminants summarized in Table 3.7-1. Alternatively, the water shall be temporarily stored onsite in holding tanks, pending off-site disposal at a disposal facility approved by the LARWQCB. An NPDES-mandated SWPPP shall include measures ensuring that potential pollutant-contaminated waters encountered during excavation would be isolated and collected for transportation to a hazardous waste treatment facility prior to their discharge into the storm drain system.</p>	<p>determined on a site-specific basis.</p>	
<p>MM GW-3: Contamination Contingency Plan. The following contingency plan shall be implemented to address unknown contamination during grading, trenching, HDD, and dewatering activities:</p> <p>a. All grading, trench excavation and filling operations, HDD, and dewatering operations shall be observed for the presence of free-phase petroleum products, chemicals, or contaminated soil/groundwater. Discolored soil or suspected contaminated soil shall be segregated from clean soil. In the event unexpected, contaminated soil or groundwater is encountered during construction, the contractor shall notify the Los Angeles Harbor Department's Chief Harbor Engineer, Director of</p>	<p>Timing: Prior to or during grading, excavation, and construction activities.</p> <p>Method: The Port shall confirm the presence of the suspect contaminated soil and direct the contractor to remove, stockpile, or contain the suspect material identified within the boundaries of the construction area. Contaminated sediments shall either be treated on-site or trucked off-site for disposal at a California licensed facility approved for disposal of such waste.</p> <p>Contaminated slurry shall be containerized, dewatered,</p>	<p>Implementation: LAHD through Construction Contractor; Plains should tenant undertake soil disturbing construction activities.</p> <p>Monitoring and Reporting: Environmental Management</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>Environmental Management, and Risk Management's Industrial Hygienist. The Port shall confirm the presence of the suspect material and direct the contractor to remove, stockpile or contain, and characterize the suspect material(s) identified within the boundaries of the construction area. Continued work at a contaminated site shall require the approval of the Chief Harbor Engineer.</p> <p>b. A photoionization detector (or other organic vapor detecting device) shall be present during grading, excavation, and HDD through suspected chemically impacted soil.</p> <p>c. Excavation of VOC-impacted soil will require obtaining and complying with a South Coast Air Quality Management District Rule 1166 permit.</p> <p>d. The extent of removal actions shall be determined on a site-specific basis. At a minimum, the chemically impacted area(s) within the boundary of the tank farm construction area or pipeline trench shall be remediated to the satisfaction of the lead regulatory agency for the site. The Port Project Manager overseeing removal actions shall inform the contractor when the removal action is complete.</p> <p>e. HDD drilling waste shall similarly be monitored for contaminants, and if present, segregated from clean soils and slurry. Contaminated slurry shall be containerized, dewatered, and dried, pending remediation or off-site disposal. Contaminated groundwater, derived from the slurry dewatering process, shall be trucked off-site and disposed at a California licensed disposal facility.</p> <p>f. The remedial option(s) of contaminated material shall be dependent upon a number of criteria (including but not limited to types of chemical constituents, concentration of the chemicals, health and safety issues, time constraints, cost, etc.) and shall be determined on a site-specific basis. Both off-site and on-site remedial options shall be evaluated.</p> <p>g. Copies of hazardous waste manifests or other documents indicating the amount, nature, and disposition of such materials shall be submitted to the Chief Harbor Engineer within 30 days of project completion.</p> <p>h. In the event that contaminated soil is encountered, all on-site personnel handling or working in the vicinity of the contaminated material shall be trained in accordance with Occupational Safety and Health and Administration (OSHA) regulations for hazardous waste operations. These regulations are based on CFR</p>	<p>and dried, pending remediation or off-site disposal. Contaminated groundwater, derived from the slurry dewatering process, shall be trucked off-site and disposed at a California licensed disposal facility.</p> <p>The remedial option(s) of contaminated material shall be dependent upon a number of criteria (including but not limited to types of chemical constituents, concentration of the chemicals, health and safety issues, time constraints, cost, etc.) and shall be determined on a site-specific basis.</p>	<p>Division, Construction Management Division, Engineering Division, Real Estate Division.</p> <p>Environmental Management Division will conduct independent soil sampling as appropriate.</p> <p>LAHD, Los Angeles Fire Department, DTSC, and/or LARWQCB</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>1910.120 (e) and 8 CCR 5192, which states that “general site workers” shall receive a minimum of 40 hours of classroom training and a minimum of three days of field training. This training provides precautions and protective measures to reduce or eliminate hazardous materials/waste hazards at the work place.</p> <p>i. In cases where potential chemically impacted soil is encountered, a real-time aerosol monitor shall be placed on the prevailing downwind side of the impacted soil area to monitor for airborne particulate emissions during soil excavation and handling activities.</p> <p>j. All excavations shall be filled with structurally suitable fill material which contains contaminant concentrations (if any) that are within permissible limits, as directed by the Los Angeles Fire Department, DTSC, and/or LARWQCB. k) Any project-related dewatering activities shall either discharge into the sanitary sewer, under permit with the City of Los Angeles Sanitation Bureau, or comply with the NPDES permit regulations and an associated SWPPP regarding discharge into storm drains and/or directly into harbor waters. Such permit requirements typically include on-site treatment to remove pollutants prior to discharge. Alternatively, the water shall be temporarily stored onsite in holding tanks, pending off-site disposal at a disposal facility approved by the LARWQCB. An NPDES-mandated SWPPP shall include measures ensuring that potential pollutant-contaminated waters encountered during excavation would be isolated and collected for transportation to a hazardous waste treatment facility prior to their discharge into the storm drain system.</p>		
<p>MM GW-4: Aquifer Cross-Contamination Prevention. The following aquifer cross-contamination prevention measures shall be implemented to address HDD related operations:</p> <p>a. Additional assessment of the hydrologic conditions of the semi-perched aquifer, Bellflower Aquiclude, and Gage Aquifer shall be performed in areas where cross-contamination could occur as a result of HDD operations.</p> <p>b. An HDD plan shall be developed and implemented to prevent the introduction of contaminated groundwater from the semi-perched aquifer into deeper aquifers along the HDD routes.</p>	<p>Timing: Prior to construction.</p> <p>Method: Groundwater assessment would include groundwater well installation for sampling and constituent analysis, as well as pumping tests to evaluate aquifer characteristics, including storage, transmissivity, and hydraulic conductivity. Groundwater samples would be analyzed for TPH, VOCs, SVOCs, PAHs, pesticides, PCBs, and metals. Groundwater samples would also be analyzed for physical groundwater characteristics including pH, conductivity, general mineral content, and other parameters. At least one set of cluster wells shall be completed to evaluate the vertical gradient and potential for vertical flow between the semi-perched aquifer,</p>	<p>Implementation: LAHD through Construction Contractor; Plains should tenant undertake soil disturbing construction activities.</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division,</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	<p>Bellflower Aquiclude, and Gage Aquifer.</p> <p>The HDD plan shall be developed based on the results of an assessment of the hydrologic conditions, as described above in “a”. The plan may include using a conductor casing during HDD through the semi-perched aquifer into the underlying Bellflower Aquiclude. Use of such a conductor casing would likely be most appropriate at the entry point to Pipeline Segment 3 South, as much of Mormon Island is underlain by NAPL.</p>	<p>Engineering Division, Real Estate Division. Environmental Management Division will conduct independent soil sampling as appropriate.</p> <p>LAHD, Los Angeles Fire Department, DTSC, and/or LARWQCB</p>
<p>MM GW-5: Frac-Out Prevention. The following frac-out prevention measures shall be implemented to address construction related frac-outs:</p> <ol style="list-style-type: none"> a. A preliminary, site-specific, geotechnical investigation shall be completed in areas proposed for HDD. b. A frac-out contingency plan shall be completed, including measures for prevention, containment, clean up, and disposal of released drilling muds that might occur either on the ground surface or into harbor waters. 	<p>Timing: Prior to construction.</p> <p>Method: Preliminary geotechnical borings shall be drilled to verify that the proposed depth of HDD is appropriate to avoid frac-outs (i.e., the depth of finest grained sediments and least fractures) and to determine appropriate horizontal directional drilling methods (i.e., appropriate drilling mud mixtures for specific types of sediments). Preventative measures would include incorporation of the recommendations of the geotechnical investigation to determine the most appropriate HDD depth and drilling mud mixture. In addition, drilling pressures shall be closely monitored so that they do not exceed those needed to penetrate the formation.</p>	<p>Implementation: LAHD through Construction Contractor; Plains should tenant undertake soil disturbing construction activities.</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division, Engineering Division, Real Estate Division. Environmental Management Division will conduct independent soil sampling as appropriate.</p> <p>LAHD, Los Angeles Fire Department, DTSC, and/or LARWQCB</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
Marine Transportation		
<p>MM 4E-8: Shield Terminal Lights Seaward sides of terminal lights shall be shielded to reduce their interference with aids to navigation lights.</p>	<p>Timing: Prior to construction.</p> <p>Method: The LAHD should incorporate a terminal light shielding plan into the proposed Project plans</p>	<p>Implementation: LAHD through Construction Contractor; Plains should tenant undertake soil disturbing construction activities.</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division, Engineering Division, Real Estate Division. Environmental Management Division will conduct independent soil sampling as appropriate.</p> <p>LAHD, Los Angeles Fire Department, DTSC, and/or LARWQCB</p>
Noise: Construction		
<p>MM 4H-1: Use of Proper Construction Equipment to Reduce Noise. The construction contractors shall utilize the quietest equipment available, and all internal combustion powered equipment shall be equipped with properly operating mufflers and kept in tune to avoid backfires. In addition, engines, if exposed, are to be fitted with protective shrouds to reduce motor noise.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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 construction activity. The contractor shall adhere to these specifications and Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD</p>	<p>Implementation: Plains LLC through Construction Contractor and LAHD</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	project/construction manager or designated building inspectors to ensure compliance with contract specifications.	
<p>MM 4H-2: Reduce Use of Portable Generators. Where feasible, electricity shall be obtained from the local power grid to avoid the use of portable generators.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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 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.</p>	<p>Implementation: Plains LLC through Construction Contractor and LAHD</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM 4H-3: Coordinate Responses to Noise Complaints. Provide for designation of a disturbance coordinator for responding to noise complaints, with his/her name and telephone number to be clearly posted at the construction site</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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 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.</p>	<p>Implementation: Plains LLC through Construction Contractor and LAHD</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM NOISE-1: 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</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the</p>	<p>Implementation: Plains LLC through Construction</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>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, 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.</p> <p>In addition, a qualified biologist 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.</p>	<p>Plains lease and 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 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.</p> <p>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.</p>	<p>Contractor and LAHD</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM NOISE-2: Restricted Hours for Pile Driving. Pile driving to be limited to between 9 AM and 5 PM, Monday through Friday and from 10 AM to 4 PM on Saturdays.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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 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.</p>	<p>Implementation: Plains LLC through Construction Contractor and LAHD</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>MM NOISE-3: Temporary Noise Attenuation Barriers. Construction equipment that will be stationary for extended periods (pipeline boring machinery, compressors, generators, etc.) can be shielded by erection of temporary noise attenuation barriers. The barriers should be installed directly between the equipment and the nearest noise sensitive use to the construction site. The need for and feasibility of noise attenuation barriers should be evaluated on a case-by-case basis considering the distance to noise sensitive receptors, the available space at the construction location, and taking account of safety and operational considerations. Noise attenuation barriers suitable for pile driving equipment should be considered using the same criteria.</p>	<p>Timing: Throughout all construction phases.</p> <p>Methods: This measure shall be incorporated into the Plains lease and 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 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 contractor should install noise attenuation barriers, where feasible according to the above criteria in consultation with the LAHD and shall be monitored for compliance by the LAHD.</p>	<p>Implementation: Plains LLC through Construction Contractor and LAHD</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>Standard Controls, in Accordance with the 1992 Deep Draft Final EIS/EIR Mitigation Measures</p> <ul style="list-style-type: none"> A. Construction would be limited to the hours of 7:00 A.M. to 6:00 P.M. on weekdays, between 8:00 A.M. and 6:00 P.M. on Saturdays, and construction equipment noise would be prohibited anytime on Sundays and holidays B. Noise-generating construction activities would not be conducted on weekends or holidays. C. All construction equipment powered by internal combustion engines would be properly muffled and maintained. D. Unnecessary idling of internal combustion engines near noise-sensitive areas would be prohibited. E. All stationary noise-generating construction equipment, such as air compressors and portable power generators, would be located as far as practical from existing noise-sensitive land uses. F. Quiet construction equipment would be selected, whenever possible. Noise limits for construction equipment established in the City of Los Angeles Noise Ordinance would be met, where feasible. G. Residents adjacent to the proposed Project sites would be notified, in writing, of the construction schedule. 	<p>Timing: Throughout all construction phases</p> <p>Methods: This measure shall be incorporated into contract specifications for all construction work to reduce the impact of construction noise. 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 the Compliance Plan throughout construction phases. Enforcement shall include oversight by the LAHD project manager or designated building inspectors to ensure compliance with contract specifications.</p>	<p>Implementation: LAHD through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
Transportation and Circulation: Construction		
<p>MM 4F-1: Encourage Carpooling. The contractor shall encourage construction workers to carpool by offering various incentives.</p>	<p>Timing: Prior to and during construction</p> <p>Methods: This measure shall be incorporated into contract specifications for all construction work to reduce the potential traffic impact. The contractor shall adhere to these specifications throughout construction phases. Enforcement shall include oversight by the LAHD project manager to ensure compliance with contract specifications.</p>	<p>Implementation: LAHD through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM 4F-2: Efficient Use of Truck Trips. When possible, trucks that are utilized to bring equipment and materials to the site shall be used to carry off any debris, excess materials, etc.</p>	<p>Timing: Prior to and during construction</p> <p>Methods: This measure shall be incorporated into contract specifications for all construction work to reduce the potential traffic impact. The contractor shall adhere to these specifications throughout construction phases. Enforcement shall include oversight by the LAHD project manager to ensure compliance with contract specifications.</p>	<p>Implementation: LAHD through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM 4F-4: Ridesharing, Parking Management, Auto Use/Truck Movement Restriction.- Tenants shall be encouraged to reduce the number of vehicle trips associated with employee vehicles by introducing ridesharing incentives, parking management programs (i.e., parking spaces to ride sharers and removing street parking), auto use restriction program, and truck movement restriction program..</p>	<p>Timing: Prior to and during construction</p> <p>Methods: This measure shall be incorporated into contract specifications for all construction work to reduce the potential traffic impact. The contractor shall adhere to these specifications throughout construction phases. Enforcement shall include oversight by the LAHD project manager to ensure</p>	<p>Implementation: LAHD through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	compliance with contract specifications.	Management Division
<p>MM 4F-5: Literature on VMT Reduction and Rideshare On-site information on the importance of the reduction in vehicle miles traveled (vmt) and related air quality impacts shall be provided and programs shall be dispensed.</p>	<p>Timing: Prior to and during construction</p> <p>Methods: This measure shall be incorporated into contract specifications for all construction work to reduce the potential traffic impact. The contractor shall adhere to these specifications throughout construction phases. Enforcement shall include oversight by the LAHD project manager to ensure compliance with contract specifications.</p>	<p>Implementation: LAHD through Transportation Engineers and Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Engineering and Construction Management Division</p>
<p>MM TRANS-1: Outbound Construction Worker Routing Outbound westbound construction workers from TCY 421 and TCY 408 would be directed to leave these yards by traveling northbound on Ferry Street, then access SR-47 westbound via the Ferry Street/SR-47 ramp interchange. Outbound eastbound construction workers would be directed to leave TCY 421 and TCY 408 by traveling southbound on Ferry Street, following Ferry Street as it turns into Terminal Way heading northeast, turn left on Navy Way, and then turn right at the Navy Way/Seaside Avenue intersection.</p>	<p>Timing: During Project construction activities at TCY 421, TCY 408, and Tank Farm Site 2.</p> <p>Methods: The construction contractor shall instruct construction personnel as part of normal construction procedures.</p>	<p>Implementation: LAHD through Transportation Engineers and Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Engineering and Construction Management Division</p>
<p>Recreation: Construction</p>		
<p>MM 4K-4: Boating Safety Measures During In-Water Construction Requires LAHD to coordinate public notifications with yacht clubs; buoy and mark construction zones; and add boating safety measures such as increased harbor patrols in the construction areas.</p>	<p>Timing: In advance of and during in-water construction.</p> <p>Methods: This measure shall be the responsibility of the Environmental Management Division (EMD) and the Real Estate Division. LAHD shall send a map and description of designated construction areas directly to yacht clubs and marinas within the Port; shall set up buoys to mark in-water construction zones prior to the start of construction; shall monitor and replace buoys during construction as needed; and</p>	<p>Implementation: LAHD through Real Estate Division</p> <p>Monitoring and Reporting: Environmental Management Division, Real Estate</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	shall increase harbor patrols in the construction area during construction. These efforts shall be documented and documents kept on file in the LAHD administration offices.	
Risk of Upset and Hazardous Materials: Construction		
<p>MM 4I-2: Clean Coastal Waters Cooperative. Facility operator handling hazardous liquid in bulk at proposed Project sites shall be a member of the Marine Spill Response Corporation (MSRC) cooperative, or equivalent Oil Spill Response Organization (OSRO) approved by the U.S. Coast Guard.</p>	<p>Timing: Throughout operation Method: The proposed Project operator would be responsible for assuring membership in Marine Spill Response Corporation (MSRC) cooperative, or equivalent Oil Spill Response Organization (OSRO) approved by the U.S. Coast Guard.</p>	<p>Implementation: Plains via lease. LAHD through Real Estate Division Monitoring and Reporting: Environmental Management Division, Real Estate</p>
<p>MM 4I-3: Onshore Oil Spill Containment. The overland pipeline transportation corridor shall be designed so that spills along the corridor would be contained and not allowed to run off into the water.</p>	<p>Timing: Throughout project design and operation Method: The proposed Project operator would be responsible for assuring designs include provisions of the mitigation measure.</p>	<p>Implementation: Plains via lease. LAHD through Real Estate Division Monitoring and Reporting: Environmental Management Division, Real Estate</p>
<p>MM 4I-4: Built-In Fire Protection Measures. Facilities handling crude oil or petroleum products shall have built-in fire protection measures that satisfy the requirements outlined in the applicable Fire Codes (see Appendix E under “Fire Prevention, Detection, and Suppression System”).</p>	<p>Timing: Throughout project design and operation Method: The proposed Project operator would be responsible for assuring designs include provisions of the mitigation measure.</p>	<p>Implementation: Plains via lease. LAHD through Real Estate Division Monitoring and Reporting: Environmental Management Division, Real Estate</p>
<p>MM 4I-5: Use of Seawater for Fire Protection. Besides fresh water supplied to the facilities, the proposed Project facilities shall also be equipped to use seawater for fire protection.</p>	<p>Timing: Throughout project design and operation Method: The proposed Project operator would be responsible for assuring designs include provisions of</p>	<p>Implementation: Plains via lease. LAHD through Real</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	the mitigation measure.	Estate Division Monitoring and Reporting: Environmental Management Division, Real Estate
MM RISK-2.1a: Double-Hulled Vessels. The proposed Project shall limit crude oil deliveries to double-hulled vessels.	Timing: Throughout operation Method: The proposed Project operator would be responsible for assuring that only double-hulled vessels would be allowed to call at the new Pier 400 terminal. The LAHD would perform periodic inspections to ensure that this measure was being followed.	Implementation: Plains via lease. LAHD through Real Estate Division Monitoring and Reporting: Environmental Management Division, Real Estate
MM RISK-2.1b: Quick-Release Couplings. Loading arms shall be equipped with USCG-approved quick-release couplings. A crude oil flow control system shall be interlocked at the coupling that will automatically stop flow prior to disconnection.	Timing: Throughout operation Method: The project applicant shall include specifications for these couplings in the proposed Project design. The LAHD shall review the design plans and periodically inspect to ensure the presence of the couplings during operations.	Implementation: Plains via lease. LAHD through Real Estate Division Monitoring and Reporting: Environmental Management Division, Real Estate
MM RISK-2.1c: Oil Spill and Eelgrass Habitat. If there is an oil spill event in the marine environment, an assessment of eelgrass habitat will be conducted by a qualified biologist and appropriate coordination will be undertaken with NMFS to ensure appropriate mitigation consistent with the Southern California Eelgrass Mitigation Policy.	Timing: During Project operations. Methods: This measure shall be the responsibility of the Environmental Management Division (EMD) and Engineering Division. In the event of an oil spill that reaches an eelgrass bed in the Port, a post-spill survey of the affected eelgrass bed and a reference (unaffected) eelgrass bed shall be completed within 30 days and the results shall be sent to NMFS, CDFG, and USFWS. The reference eelgrass bed shall be located within Southern California, and within the Port if possible. The actual and relative area of impact shall be determined from this survey. An additional	Implementation: Plains via lease. LAHD through Environmental Management Division and Engineering Monitoring and Reporting: Environmental Management Division, Real Estate, Engineering and Plains.

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
	<p>survey of the affected and reference areas shall be completed after 12 months to insure that impacts attributable to the oil spill have not exceeded the Southern California Eelgrass Mitigation Policy de minimis threshold of 10 square meters, or to document recovery of the eelgrass bed.</p> <p>Compensatory mitigation may be required should the post-spill or 12 month survey demonstrate loss and/or degradation of eelgrass greater than the de minimis thresholds pursuant to the Southern California Eelgrass Mitigation Policy (e.g., loss of > 10 square meters and/or 25 percent reduction in density).</p> <p>Compensatory mitigation shall be determined on a case-by-case basis in consultation with the resource agencies consistent with the Eelgrass Mitigation Policy</p>	
Utilities and Public Services		
<p>MM 4N-1: Incorporate Water Conservation into Project Design Water conservation devices and systems shall be incorporated into the proposed Project designs, including those required by the State of California Department of Water Resources. These include the following:</p> <ol style="list-style-type: none"> 1. Any landscape plans shall emphasize a planting scheme that minimizes water irrigation requirements and shall use drought-resistant, native vegetation. 2. The proposed Project shall pursue the use of reclaimed water from the Terminal Island Treatment Plant for use in terminal operations. <p>The use of seawater for fire suppression shall be investigated.</p>	<p>Timing: Prior to building permit, during facility design.</p> <p>Methods: This measure shall be incorporated into contract specifications for all construction work to improve water conservation. 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.</p>	<p>Implementation: LAHD through Construction Contractor</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM PS-1: Recycling of Construction Materials Demolition and/or excess construction materials shall be separated on-site for reuse/recycling or proper</p>	<p>Timing: Throughout all construction phases.</p>	<p>Implementation: Plains LLC through Construction</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
<p>disposal. During grading and construction, separate bins for recycling of construction materials shall be provided on-site.</p>	<p>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.</p>	<p>Contractor and LAHD</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM PS-2: Materials with Recycled Content Materials with recycled content shall be used in project construction. Chippers on site during construction shall be used to further reduce excess wood for landscaping cover.</p>	<p>Timing: Throughout all construction phases.</p> <p>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.</p>	<p>Implementation: Plains LLC through Construction Contractor and LAHD</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>
<p>MM PS-3: Solid Waste Integrated Resources Plan Compliance: 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.</p>	<p>Timing: Throughout all construction phases.</p> <p>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.</p>	<p>Implementation: Plains LLC through Construction Contractor and LAHD</p> <p>Monitoring and Reporting: Environmental Management Division, Construction Management Division</p>

Table 2-1. Continued

Mitigation Measure	Timing and Methods	Responsible Parties
Water Quality		
<p>MM 4B-7: Increase Local Staffing of CDFG OSR Personnel. Requires that the Port petition the state for increased local staffing of the OSPR to reduce the level of accidental spills at ship fuel docks.</p>	<p>Timing: Ongoing.</p> <p>Method: The Port shall make a continual (at least once yearly) concerted effort to petition the state for increase staffing of OSPR personnel. These efforts shall be documented and kept on file in the Port’s administration offices.</p>	<p>Implementation: LAHD Environmental Management and Plains and LAHD</p> <p>Monitoring: LAHD Environmental Management</p>
<p>MM WQ-1.2: Cleanup of Floating Materials Retained by Containment Boom. All vessels at Berth 408 shall be surrounded by a spill containment boom prior to initiating unloading operations. Following unloading and before releasing the boom, the project tenant shall visually inspect the water surface or the area encircled by the containment boom and recover and dispose any floating materials (e.g., trash) or petroleum sheen.</p>	<p>Timing: Ongoing.</p> <p>Method: Trained wharf personnel shall complete and document a visual inspection of surface waters between ship hull and containment boom. Any floating debris shall be retrieved and disposed as solid waste. All debris shall be retrieved before the boom is released and the ship leaves the berth.</p>	<p>Implementation: LAHD Environmental Management and Plains and LAHD</p> <p>Monitoring: LAHD Environmental Management</p>

