Pacific L.A. Marine Terminal LLC Crude Oil Terminal Draft Project -Environmental Review -

A Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR) on the Pacific L.A. Marine Terminal LLC Crude Oil Terminal Project, prepared by the U.S. Army Corps of Engineers (Corps) and Port of Los Angeles (Port), will be released for public review. The Draft SEIS/SEIR provides information on the proposed project, alternatives to the project, anticipated environmental impacts of the project and alternatives, and mitigation to reduce or eliminate impacts. Following the public process, the Corps and Port will revise the Draft SEIS/SEIR and use it as a basis in drafting the Final SEIS/SEIR.

<u>Subsequent/Supplemental Document:</u> The development of a deep-draft marine oil terminal on Pier 400 is consistent with the project that was originally envisioned and analyzed in the Deep Draft EIS/EIR and therefore is not a major revision to the original project. The proposed Project is on land that was created as a result of the environmental review and approvals that occurred during the original Deep Draft EIS/EIR process. However, the LAHD is designating this document as a Subsequent EIR (and the USACE is considering it a Supplemental EIS) because it represents not simply an updating of the Deep Draft EIS/EIR, but a full, project-specific EIR that tiers from the Deep Draft EIS/EIR.

-Project Features-

The proposed Project would include construction and operation of a new marine terminal at Berth 408 on Pier 400 (Marine Terminal), new tank farm facilities with a total of 4.0 million barrels (bbl) of capacity, and pipelines connecting the Marine Terminal and the tank farms to local refineries. The terminal would be operated by Pacific Los Angeles Marine Terminal, LLC (PLAMT) under a 30-year lease from the Los Angeles Harbor Department (LAHD). PLAMT is a wholly-owned subsidiary of Plains All American Pipeline, L.P. (Plains).

- Berth 408 Marine Terminal
 - Wharf Construction
 - Terminal construction: Buildings and Pumps including two 250,000-bbl tanks
 - 30-year lease (2010-2040)
 - AMP facilities on wharf
 - LEED Certified Admin. Building

- Tank Farms and Pipes
 - Terminal Island (TI) Tank Farm including Fourteen 250,000-bbl tanks
 - Motor Control Center, Tank Farm Operator Office and Control Building
 - 42-inch diameter pipeline from the Marine Terminal to TI Tank Farm
 - Two 36-inch diameter pipelines would connect TI Tank Farm to the existing network of pipelines at Ferry Street
 - 36-inch diameter spur running from the existing network at Ferry Street into the ExxonMobil Southwest Terminal

-Proposed Project -



-Proposed Project Objectives and Need-

OBJECTIVE: To construct a crude oil marine terminal capable of accommodating deep-draft VLCC tankers 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.

NEED: Consumer demand for transportation fuels exceeds the capacity of refineries to produce them, both statewide and in southern California specifically. Crude production from California and Alaska (as well as the rest of the U.S.) is decreasing. California crude production peaked in 1985 and has declined by 39 percent since 1986; Alaskan crude production peaked in 1988 and has declined 60 percent since that time. The decline in domestic production has resulted in an increase in foreign imports, which arrive in the Los Angeles area after being transported via tanker vessels.

California Assembly Bill 1007 directed the CEC, in partnership with CARB, to develop a State Alternative Fuels Plan to increase the use of alternative fuels without adversely affecting air pollution, water pollution, and public health. However, even with full implementation of the State Alternative Fuels Plan, CEC found that "conventional petroleum fuels will be the main source of transportation energy for the foreseeable future.... California must address its petroleum infrastructure problems and act prudently to secure transportation fuels to meet the needs of our growing population" (CEC 2007b). CEC stated further that "This should be viewed as a strategy to allow time for the market and consumer behavior to adjust to alternative fuels and transportation choices. During this transition, California must be innovative and aggressive in finding more ways to make increased efficiency, greater renewable fuel use, and smart land use planning the most desirable consumer options" (CEC 2007b).



FOREIGN SUPPLY: In 2005, about 45% of foreign crude oil imports to southern California came from the Middle East (i.e., Saudi Arabia, Iraq, Yemen, Oman, and Kuwait), and another 46% came from Central and South America. Middle East imports generally arrive in VLCC vessels because larger vessels are more cost effective for longer voyages than smaller vessels. However, as no crude oil terminals in Southern California are capable of accommodating a fully loaded VLCC due to wharf and water depth restrictions, fully loaded VLCCs must currently offload crude oil onto smaller vessels to transfer to the receiving terminal, a process called lightering.

CURRENT CAPACITY: Currently five terminals close to Los Angeles are capable of receiving crude oil: Berths 76-78, 84-87, and 121 in POLB, Berths 238-240 in Port, and an offshore mooring facility off the coast of El Segundo in Santa Monica Bay. Outside of these facilities, the nearest U.S. terminals capable of receiving crude oil tankers are at the Port of Hueneme (Ventura County) and the San Francisco Bay Area. However, the Port of Hueneme can accommodate only barges, not tanker vessels, and is primarily designed to receive crude oil from offshore platforms. The Bay Area petroleum import infrastructure is also at or near capacity, and the maximum depth at berth available to tanker vessels is 50 feet (CEC 2005). Crude oil pipelines currently transport California crude oil from the San Joaquin Valley to the Los Angeles Basin, but no pipelines transport crude oil into California from neighboring states or from Mexico.



NO PROJECT: Without the Project, it is assumed that a portion of the increased demand for imports of crude oil in southern California would be accommodated at existing liquid bulk terminals in the Port and the Port of Long Beach. Increased lightering could take place in coastal waters, would create increased air quality, risk of upset, water quality, and marine transportation impacts. Additional imports of crude oil may come in by truck, rail, or barge (no pipelines transport crude oil into California, neither from neighboring states nor from Mexico), and additional refined products may come in by vessel, barge, truck, or rail.

-Proposed Project -

-Proposed Project and Alternatives Comparison-

	CEQA Baseline 2004	Proposed Project 2040	No Federal Action/No Project 2040	Reduced Project Alternative 2040
Marine Terminal Acreage	0	5 acres	0	5 acres
Total Tank Farm Acreage	0	47.7 acres	0	47.7 acres
Tanker Calls at Berth 408	0	201 per year	267per year	132 per year
Average Crude Oil Throughput	0	677,000 bpd	252,000 bpd	450,000 bpd
Barge Calls at Berth 408	0	12	0	8
Crude Oil Storage Tanks	0	16	0	16
Crude Oil Tank Capacity	0	4.0 million bbl	0	4.0 million bbl
Employees	0	54	12	61

-Proposed Project Impacts-

Unavoidable Significant Impacts

- Air Quality and Meteorology (Construction, GHG, Criteria Pollutants)
- Biological Resources (CA Least Terns and Marine Resources)
- Geology (Seismic)
- Noise (Construction)
- Water Quality (Discharges)
- Recreation (Possible spills)
- Hazards(Possible spills)

Impacts that are Less than Significant after Mitigation

- Utilities and Public Services
- Transportation
- Groundwater and Soils

Less than Significant Impacts

- Aesthetics
- Cultural Resources
- Land Use
- Marine Vessel Transportation
- Population and Housing

-Project Mitigations-

Project mitigation includes aggressive measures to reduced air emissions such as AMP and low sulfur fuel (0.2% in main engines, auxiliary engines, and boilers. Measures to reduce greenhouse gas emissions include solar panels, LEED certified terminal buildings, and regular energy audits. A complete list of mitigation measures can be found on the next page.

• Air Quality: Construction

- MM AQ-1: Ridesharing or Shuttle Service
- MM AQ-2 Staging Areas and Parking Lots
- MM AQ-3: Construction Equipment Standards
- **MM AQ-4:** Electricity Use Clean Harborcraft Used During Construction
- MM AQ-5: Best Management Practices
- **MM AQ-6**: Additional Fugitive Dust Controls
- MM AQ-7: VSRP for Cargo Ships
- **MM AQ-8**: Low-Sulfur Fuel for Construction Delivery Vessels
- **MM AQ-9**: Engine Standards for Harbor Craft Used in Construction
- **MM AQ-10**: Fleet Modernization for Construction Equipment
- MM AQ-11: General Mitigation Measure
- **MM AQ-12:** Special Precautions near Sensitive Sites.

• Air Quality Operation

- MM AQ-13: Vessel Speed Reduction Program
- **MM AQ-14**: Low-Sulfur Fuel Ship Auxiliary Engine, Main Engine and Boiler Fuel Improvement Program (0.2%)
- MM AQ-15: Alternative Maritime Power
- MM AQ-16: Slide Valves
- MM AQ-17: Parking Configuration
- MM AQ-18: New Vessel Builds
- MM AQ-19: General Mitigation Measure
- MM AQ-20 Periodic Review of New Technology and Regulations
- MM AQ-24: Throughput Tracking
- **MM AQ-25:** LEED Certification
- MM AQ-26: Compact Fluorescent Light Bulbs
- MM AQ-27: Energy Audit
- MM AQ-28: Solar Panels
- MM AQ-29: Recycling
- MM AQ-30: Tree Planting

• Biology

- MM BIO-1.1a: Least Tern Monitoring
- **MM BIO-1.1b:** Stone Column Installation Monitoring
- MM BIO-1.1c: Construction Schedule
- **MM BIO-1.1d:** Construction Contractor Environmental Training
- MM BIO-1.1e: Perches
- MM BIO-1.1f: Lighting
- MM BIO-1.1g: Vegetation Clearing
- **MM BIO-1.1h**: Protection of Special Status Species Nesting Birds
- **MM BIO-1.1i:** Protection of California Least Tern Nesting
- MM BIO-1.1j: Noise Buffer
- MM BIO-1.2a: Structure Perches
- MM BIO-1.2b: Predator Control

- MM BIO-1.2c: Oil Spill Containment
- **MM BIO-1.2d**: Security Lighting
- **MM BIO-1.2e**: Operations Personnel Environmental Training
- MM BIO-1.2f: Vessel Speed Reduction
- Geology
 - MM GEO-1: Emergency Response Planning

• Transportation

- **MM TRANS-1:** Outbound Construction Worker Routing
- MM 4F-1: Encouraging Carpooling
- **MM 4F-2**: Efficient Use of Truck Trips
- **MM 4F-4:** Ridesharing, Parking Management, Auto Use/Truck Movement Restrictions
- **MM 4F-5:** Literature on VMT Reduction and Rideshare.

• Groundwater

- MM GW-1: Site Characterization and Remediation
- **MM GW-2:** Soil, Slurry, and Groundwater Characterization
- **MM GW-3:** Contamination Contingency Plan
- **MM GW-4:** Aquifer Cross-Contamination Prevention
- MM GW-5: Frac-Out Prevention

• Noise

- MM 4H-1: Use of Proper Construction Equipment MM 4H-2: Reduce Use of Portable Generators
- **MM 4H-3:** Coordinate Responses to Noise Complaints
- **MM NOISE-1:** Selection of Contractor For Pile Driving With Consideration of Noise Reduction
- **MM NOISE-2:** Restricted Hours for Pile Driving
- MM NOISE-3: Temporary
- Hazards
 - MM 4I-2: Clean Coastal Waters Cooperative
 - MM RISK-2.1a: Double Hulled Vessels
 - o MM RISK-2.1b: Quick Release Couplings
- Utilities and Public Services
 - MM PS-1: Recycling of construction materials
 - **MM PS-2:** Using materials with recycling content
 - MM PS-3: AB 939 Compliance
- Water Quality
 - **MM 4B-7:** Increase Local Staffing of Department of Fish and Game Oil Spill Response Personnel
 - **MM WQ-1.2:** Cleanup of Floating Materials Retained by Containment Boom

-Criteria Pollutants: Significant and Unavoidable-Community Concerns

-Throughput-					
Element	CEQA Baseline (2004)	Proposed Project (2010) ¹	Proposed Project (2015)	Proposed Project (2025)	Proposed Project (2040)
Marine Terminal Acreage	0	5 acres	5 acres	5 acres	5 acres
Total Tank Farm Acreage	0	47.7 acres	47.7 acres	47.7 acres	47.7 acres
Tanker Calls	0	129 per year	147 per year	201 per year	201 per year
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 ²	48	54	54

1 The proposed Project is projected to begin operation in 2010

2 The peak number shown represents peak employment during the construction phase (taking into account that operations would start in 2010 while construction is ongoing



• The proposed Project peak emissions without mitigation would not change over time. Emissions are assumed to begin in 2010 and continue until 2040.

-Health Risk Assessment (HRA): Less than Significant after Mitigation-Cancer, Chronic (non-cancer) and Acute (non-cancer) *Community Concerns*



Cancer Risk Isopleths

Proposed Project Health Risk

Health Impact	Receptor Type	Proposed Project	Mitigated Project	Significance Thresholds	
Cancer Risk	Residential	12 in a million	5.3 in a million		
	Occupational Area	9.7 in a million	4.8 in a million	10 in a million	
	Sensitive Receptor	12 in a million	5.3 in a million		
	Student	6.9 in a million	2.4 in a million		
Non-Cancer Chronic Hazard Index	Residential	0.017	0.0095		
	Occupational Area	0.073	0.044	1	
	Sensitive Receptor	0.017	0.0095	1	
	Student	0.012	0.0064		
Non-Cancer Acute Hazard Index	Residential	0.04	0.019		
	Occupational Area	0.043	0.026	1	
	Sensitive Receptor	0.04	0.019	1	
	Student	0.028	0.013		

-Hazardous Materials: Significant and Unavoidable for Potential Spills--Terrorism and Security: Less than Significant-*Community Concerns*

The below figure shows the Risk Matrix of Crude Oil Tanker Spills in the Port. As shown, there is a significant risk for single-hulled vessels. This project will be restricted to double-hulled vessels.

	Probability					
		Extraordinary >1,000,000 years	Rare >10,000 <1,000,000 years	Unlikely >100 <10,000 years	Likely >1 and <100 years	Frequent (>1/year)
suces	Disastrous (>357,142 bbl)	Double-Hull Large Oil Spill	Single-Hull Large Oil Spill			
ənbəsu	Severe (2,380–357,142 bbls)					
Coi	Major (238–2,380 bbl)		Moderate Oil Spill (all designs)			
	Minor (10-238 bbl)			Double-Hull Small Oil Spill	Single-Hull Small Oil Spill	
	Negligible (<10 bbls)					
Not	tes. Incidents that fall in t	he shaded area of th	e risk matrix would b	e classified as signifi	cant	

Oil spills would be reduced by the following measures:

- Double-Hulled Vessels: Crude oil deliveries will be restricted to double-hulled vessels.
- *Pipeline Leak Detection System:* For all pipelines systems. The system would automatically alert the operator if a leak occurs so that appropriate actions can be taken to minimize the spill volume and duration.
- *Quick-Release Couplings:* Loading arms will be equipped with USCG-approved quick-release couplings.
- *Fire-Fighting System:* Each tank farm would be protected by a firewater loop line and equipped with a foam storage tank and proportioning skid. The crude oil tanks would be equipped with a foam ring and foam chambers.
- *Oil Booms:* Oil booms will be stored at the south entrance of the Pier 300 Shallow Water Habitat or at the causeway gap bridge at the south entrance to the Pier 300 Shallow Water Habitat, or deployed at these locations in accordance with the approved oil spill response plan.

Security

The likelihood of a successful terrorist attack is considered fairly low. However, potential impacts related to terrorism risk would be considered significant given the environmental and public safety consequences associated with a successful terrorist attack. Because oil does not explode, the main environmental issue associated with a potential attack would be oil spills. A variety of programs are in place at the Port to reduce potential terrorist threats. The Berth 408 operators would be required to participate in these programs, thus further minimizing the risk associated with terrorism.

The following measures would reduce environmental impacts due to terrorism:

Terminal Security Measures

The Berth 408 terminal will be required to submit a Facility Security Assessment (FSA) and a Facility Security Plan (FSP) to the Coast Guard Captain of the Port for review and approval. The Berth 408 FSP would need to include the following:

- Designating a Facility Security Officer (FSO) with a general knowledge of current security threats and patterns, risk assessment methodology, and with the responsibility for implementing and periodically updating the FSP and Assessment and performing an annual audit for the life of the Project
- Conducting an FSA to identify site vulnerabilities, possible security threats, consequences of an attack, and facility protective measures;
- Developing an FSP based on the FSA with procedures for responding to transportation security incidents; notifying and coordinating with local, state, and federal authorities, preventing unauthorized access; implementing measures and equipment to prevent or deter dangerous substances and devices; and conducting training and evacuation;
- Implementing scalable security measures to provide increasing levels of security at increasing Maritime Security (MARSEC) levels for facility access control, restricted areas, cargo handling, vessel stores and bunkers, and monitoring;
- Conducting security exercises at least once each calendar year and drills at least every 3 months; and
- Mandatory reporting of all security breaches and incidents.

Vessel Security Measures

All vessels 300 gross tons or larger that are flagged by IMO signatory nations adhere to the ISPS Code standards. These requirements include:

- Ships must develop security plans that address monitoring and controlling access; monitoring the activities of people, cargo, and stores; and ensuring the security and availability of communications;
- Ships must have a Ship Security Officer (SSO);
- Ships must be provided with a ship security alert system. These systems transmit ship-to-shore security alerts to a competent authority designated by the Flag State Administration, which may communicate the company name, identify the ship, establish its location, and indicate that the ship's security is under threat or has been compromised. For the west coast, this signal is received by the Coast Guard Pacific Area Command Center in Alameda, California;
- International port facilities that ships visit must have a security plan, including focused security for areas having direct contact with ships;
- Ships may have certain equipment onboard to help maintain or enhance the physical security of the ship including:
 - Monitoring and controlling access;
 - Monitoring the activities of people and cargo;
 - o Ensuring the security and availability of communications; and,
 - Completing a Declaration of Security signed by the FSO and SSO, which ensures that areas of security overlapping between the ship and facility are adequately addressed.

Vessels flagged by nations which are not IMO signatory are subject to special USCG vessel security boarding prior to entering port.

-Land Use and Traffic: Less than Significant-Community Concerns

There are no truck or rail trips as a result of the proposed Project. All oil will travel only by pipeline.

Land Use

The Project would be located within the Port Master Plan's planning Areas 5, 7, and 9. Residences and other sensitive uses located in San Pedro and Wilmington would be at least 0.5 mile from the nearest pipeline construction site, and over 1 mile from a tank farm site or the Marine Terminal Although a portion of the proposed 24-inch pipeline would be constructed along the northernmost boundary of the POLA, across Alameda Street from Wilmington residences, this pipeline would be placed underground and would be located on POLA property. No portion of the pipelines would be routed through a residential community.



Because the oil will only leave the facility landside by pipeline (i.e. no truck or rail trips), there will be no traffic impacts. The Draft SEIS/SEIR analyzes construction and employee travel which are both less than significant.

-Aesthetics: Less than Significant-Community Concerns

Project Features not within Critical Public Views:

- Tank Farm 2
- Pipelines
- Construction Staging areas

Project Features within Critical Public Views:

- Tank Farm 1
- Marine Tankers
- Barges

Views from Cabrillo Beach Pre and Post Project



The Corps and the Port will use the contents of the DEIS/EIR in deciding whether to approve a project or project alternative. The steps in the process and opportunities for public input are identified below:

Step 1 - Notice of Intent/Preparation (NOI/NOP)

This NOI/NOP was published for public review in June 2004. Comments received on the NOP/NOI were used in the preparation of the DEIS/EIR.

Step 2 - Draft EIS/EIR (DEIS/EIR)

The Draft EIS/EIR will be released for a 60-day review period beginning on May 28th with close of comments on July 29, 2008.

Availability: The Draft EIS/EIR is available for review at the following locations:

Los Angeles Public Library, Central Branch	Los Angeles Public Library, Wilmington Branch
630 West 5th Street	1300 North Avalon Blvd.
Los Angeles CA 90071	Wilmington, CA 90744
Los Angeles Public Library, San Pedro Branch	Port of Los Angeles Administration Building
921 South Gaffey Street	425 South Palos Verdes Street
San Pedro, CA 90731	San Pedro, CA 90731

The DEIS/EIR is available on line at <u>www.portoflosangeles.org</u>. A limited number of printed copies of the DEIS/EIR are also available at the Port's Environmental Management Division offices to purchase. The DEIS/EIR is also available on CD for no charge.

Public Meeting: There will be a public meeting to receive oral and written comments on June 26, 2008 at 6:00 p.m. in the Board Hearing Room. This meeting is to be conducted in English with simultaneous English/Spanish translation services provided.

Written Comments: Written comments on the Draft EIS/EIR can be provided at the Public Meeting or sent any time prior to July 29, 2008 to both of the addresses below:

U.S. Army Corps of Engineers, Los Angeles District Regulatory Division c/o Spencer D. MacNeil D.Env. ATTN: CESPL-RG-2004-00917-SDM P.O. Box 532711 Los Angeles, California 90053-2325 Dr. Ralph G. Appy Port of Los Angeles 425 South Palos Verdes Street San Pedro, CA 90731

Comments can also be sent electronically to: ceqacomments@portla.org

Step 3 - Final EIS/EIR (FEIR/EIS)

A FEIS/EIR will be prepared following receipt of oral and written public comments received. The FEIS/EIR will include responses to all of the comments received on the DEIS/EIR and will include any changes required to the DEIR/EIS as a result of public comment. Staff anticipates this will occur in the fall of 2008.

Step 4 - Approval Action(s)

Following completion of the FEIS/EIR, a public hearing(s) will be held by the Port where the Board of Harbor Commissioners will deliberate on whether to certify the FEIR and whether or not to approve a project or project alternative. Comments from the public will be taken by the Board at that hearing. Port staff anticipate this hearing will be held in the fall of 2008. The Corps is expected to prepare a Record of Decision within 60 days of publication of FEIS.