THE PORT OF LONG BEACH

# MEMORANDUM

LONG BEACH CALIFORNIA

**DATE** October 20, 2006

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**TO** Honorable Suja Lowenthal, Chair
Tidelands and Harbor Committee

**FROM** Carl A. Kemp, Director of Government Affairs

**SUBJECT** Tidelands and Harbor Committee Meeting, October 24, 2006



Per your request, please find attachments relevant to the following topics:

a. Green Port Policy
   - Memo to the Board of Harbor Commissioners
   - Green Port Annual Report (Available online at polb.com)

b. San Pedro Bay Clean Air Action Plan
   - San Pedro Bay Clean Air Action Plan (Available online at polb.com)

c. Upcoming EIRs/Developments expected over the next 12-18 months.
   - Notice of Preparation Documents for Middle Harbor, Pier A West and Gerald Desmond Bridge projects (Available online – except Gerald Desmond Bridge)

d. Overview of the Port's 3-5 year Public Safety Funding Plan
   - To be delivered verbally. Copies of these slides will be available at the committee.

e. Overview of reimbursement funding for Lifeguards, Long Beach Police Department, and Long Beach Fire Department.
   - To be delivered verbally. Copies of these slides will be available at the committee meeting.

We hope that you will find this information useful and we look forward to the discussion on October 24th. Should you have any questions, please feel free to contact me at 590-4115.

Attachments

THE PORT OF LONG BEACH

# MEMORANDUM

LONG BEACH CALIFORNIA

**DATE** September 20, 2006 **BOARD UPDATE**

**TO** Board of Harbor Commissioners

**FROM** Robert Kanter, Director of Planning

**SUBJECT** Green Port Program Update

As you know, in January 2005, the Board adopted the Green Port Policy to serve as a guide for decision making and establish a framework for environmentally friendly port operations. The program includes annual reports to be submitted to the Board; the 2005 report was provided in April of this year. In view of the upcoming Green Port Open House, staff takes this opportunity to inform the Board of recent activities that will be more fully described in the 2006 Port of Long Beach Annual Report. That report is expected to be published in April, 2007.

The Green Port Program includes six basic program elements, each with an overall goal:

- ***Wildlife*** - Protect, maintain or restore aquatic ecosystems and marine habitats
- ***Air*** - Reduce air emissions from Port activities
- ***Water*** - Improve the quality of Long Beach Harbor waters
- ***Soil/Sediment*** - Remove, treat, or render suitable for beneficial reuse, contaminated soils and sediments in the Harbor District (for 2006 this element has been divided into separate issues: soils and groundwater, and sediments)
- ***Community Engagement*** – Interact with and educate the community regarding Port operations and environmental programs
- ***Sustainability*** – Implement sustainable practices in design and construction, operations, and administrative practices throughout the Port.

Thus far in 2006 significant progress has been made in each of the elements, as described below. All of these programs are in various states of completion and will be reported on in the 2006 Annual Report. That report will address metrics for the projects, as applicable, as well as results to date.

**WILDLIFE**

- Harbor-Wide Biological Survey: Working with POLA preparing a Request for Proposal (RFP) and consultant qualifications for the next survey; RFP expected to be issued by the end of the year.
- Endangered Species: Completed the ninth year of monitoring the black-crowned night heron colony at Gull Park.
- Wetlands Restoration: Authorized a review of restoration plans for Colorado Lagoon to evaluate options for Port participation.

**AIR QUALITY**

- San Pedro Bay Clean Air Action Plan: In partnership with POLA, and with the cooperation of the U.S. EPA, CARB and SCAQMD, the Port released the draft plan for public review; the plan is being finalized and the Board is expected to consider plan approval in November.
- Marine Vessel Exhaust Treatment: Completed the environmental documentation for development of a pilot-phase, dock-mounted "sock on a stack" exhaust treatment system to serve cargo ships at the Metropolitan Stevedore Co. facility on Pier G, and to facilitate potential expansion of the treatment system around the entire Southeast Basin.

- Cold-Ironing: Executed two Green Leases that commit the Port and its tenants to shoreside power for cargo vessels. Began construction of the BP Berth T121 cold-ironing project.
- Vessel Speed Reduction: Under the current incentive program, compliance with the voluntary speed limit has reached nearly 85%, not far from the program's goal of 90% and significantly higher than last year's compliance rate of 65%.
- Pacific Harbor Lines Locomotives: Production of Tier 2 locomotives has started and delivery of the first locomotive is currently scheduled for January 2007. Testing of the diesel hybrid locomotive is complete.
- LNG-Powered Cargo-Handling Equipment (CHE): Demonstration project underway and testing will be completed by the end of 2006.
- Hybrid-Technology CHE: EPA has awarded $300,000 in grant funding to POLB and a RFP for a demonstration project to evaluate diesel hybrid technology will be issued by the end of the year.
- Air Monitoring Stations: Installed and began operation of two air monitoring stations in the Port; data links to the internet will be operational in September.
- Emissions Inventory: The 2005 inventory and comparisons with 2002 will be completed by the end of the year.
- LNG Truck Fleet and Fueling Infrastructure: Request for Proposals has been developed and will be released for bid by the end of the year.

**WATER QUALITY**

- Storm Water Monitoring: Installation of 11 state-of-the-art, automatic remote sampling devices will be completed by the end of the year.
- TMDL Sampling: Participating in Dominguez Watershed Group; Data Gap Study is underway and will be completed by the end of the year.

**SOIL AND GROUNDWATER PROTECTION**

- Soil Remediation: Removed and treated or disposed of approximately 21,994 tons of contaminated soils from Port development and remediation projects.
- Clean Fill , Export, and Reuse Guidelines: Updated guidelines for managing potentially contaminated fill material and excavated material.
- Pier A West: Cleanup goals will be finalized by the end of the year; supporting DTSC in the preparation of an EIR for site remediation.

**SEDIMENT CLEANUP**

- Sediment Characterization: Testing of sediments required to assess disposal options, for the Middle Harbor and Berth B77 (BP) projects has been completed.
- IR Site 7 (West Basin): Negotiation of an MOU with DTSC for preparation of the EIS/EIR for sediment remediation is underway, and pre-remedial design has been initiated.
- Western Anchorage Clean Sediment Site: Draft sediment management plan will be submitted to the Corps and EPA for review and approval by the end of the year.

**COMMUNITY OUTREACH**

- Green Port Open House: Scheduled the second annual Open House for October 7; preparation of displays and exhibits are underway.
- Harbor Urban Reforestation Program: Completed tree planting and community outreach events at Hudson and Coolidge parks.
- Pulse of the Port Cable TV Show: In the four shows that were produced and aired in 2006, six segments featured Green Port environmental efforts.
- Re:Port Newsletter: Promoted Green Port programs through the Port's quarterly newsletter, distributed to more than 170,000 residents.

- Outreach/Public Events: Conducted celebratory events for the BP Green Flag/Cold-Ironing project and the Matson and ITS/"K" Line Green Lease signings; conducted an extensive informational campaign and two community workshops for the Clean Air Action Program; participated in over 60 community outreach events to publicize the Green Port Program; distributed hundreds of copies of the 2005 Green Port Annual Report

**SUSTAINABILITY**

- Sustainability Training/Outreach: The first draft of the sustainability training video has been delivered and reviewed. After it is previewed at the October All-Hands Meeting, this video will be used for training all Port employees in implementing the sustainable practices goals of the Port.
- Environmental Management System: The project team completed the first phase of the EMS, which defined the fence line as the Development Bureau's purchasing and procurement procedures, as well as defining the project's goals, scope, and activities to be addressed. The project team is traveling to Cleveland in September for the Phase 2 training, which will include measurement and performance benchmarking training.
- Sustainable Landscape Palettes: The contract with the design consultant has been executed and the kickoff meeting held. Work will include designing a sustainability garden for the Port's Administration Building.
- Recycling Program: The Port has recycled over 6,750 lbs. (over 3 tons) of paper, cardboard, plastic, bottles and cans since April 2006, when the expanded recycling program starting recording this data.

The progress realized in 2006 is a testimony to the participation by staff in all Divisions, who have worked cooperatively towards meeting the Green Port program's goals and implementing its programs. In addition, the Planning Division, in cooperation with other divisions, is currently developing a Green Port Action Plan which will more specifically define each Division's responsibilities and overall implementation of the Green Port Policy. A main focus of the Action Plan will be integrating sustainable strategies for which each division will be responsible for implementing, and clearly linking them with the 2005 Port of Long Beach Strategic Plan. The Action Plan will serve as an internal guidance document and will be updated annually to reflect any overall changes to environmental requirements, as well as any changes to Port policy and procedures.

Robert Kanter, Ph.D.
Director of Planning and Environmental Affairs

Recommended by

Kevin J. Eldridge
Deputy Executive Director

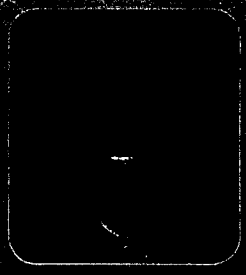
Approved by

Richard D. Steinke
Executive Director

RC:s


# 2005 Green Port Annual Report

## Long Beach Board of Commissioners



DORIS TOPSY-ELVORD
*President*

JAMES C. HANKLA
*Vise-President*

MARIO CORDERO
*Secretary*

JOHN W. HANCOCK
*Commissioner*

DR. MIKE WALTER
*Commissioner*

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*All wildlife and environmental photographs featured in this report were taken in the Port of Long Beach, with the exception of the photograph of the Bolsa Chica Wetlands at the top of Page 2.*

# The Green Port Policy

The Port of Long Beach is committed to improving the environment, as demonstrated by its 20-year record of environmental protection programs. With the Port's rapid trade growth in recent years—cargo has nearly quadrupled in the past 15 years and is projected to nearly triple in the next 15 years (FIGURE 1)—the Port recognizes the need for a more aggressive, comprehensive and coordinated approach to reduce the negative impacts of Port operations.

In 2002 the Port established its Healthy Harbor program to manage its various environmental programs and practices. The Port has since recognized that the Healthy Harbor program, while significant, lacked a unified policy and a clear statement of the environmental ethic needed to guide Port development and operations. In November 2004 the Board of Harbor Commissioners (Board) directed the Port to develop a new, improved policy that would encompass wide-ranging environmental goals. This Green Port Policy, which the Board adopted in January 2005, serves as a guide for decision making and established a framework for environmentally friendly Port operations. The policy's five guiding principles are:

1. Protect the community from harmful environmental impacts of Port operations
2. Distinguish the Port as a leader in environmental stewardship and compliance
3. Promote sustainability
4. Employ best available technology to avoid or reduce environmental impacts
5. Engage and educate the community

In addition to the Green Port Policy's overall principles and the goals for each component, the policy includes metrics (scientific measurements of the Port's environmental progress) and a commitment to regular reporting. The Port has been developing appropriate metrics for the various elements; those that have been developed are presented in this report. Future reports will present additional metrics.

Three quarterly reports were submitted to the Board during 2005. The latest can be found in the Environment section of the Port's website, www.polb.com. This report is the first annual report on the achievements, progress and upcoming activities of the Green Port Policy in each of its six basic areas.

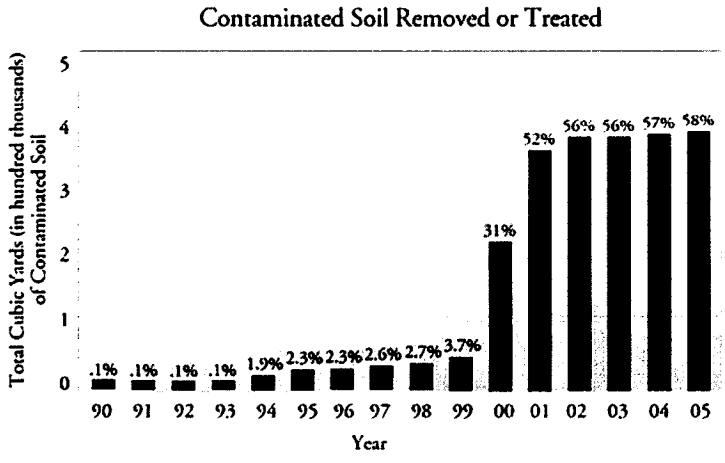



FIGURE 1: Cargo volume at the Ports of Long Beach and Los Angeles have nearly tripled in the last decade.

The Green Port Policy includes six basic program elements, each with an overall goal.

**WILDLIFE**
Protect, maintain or restore aquatic ecosystems and marine habitats

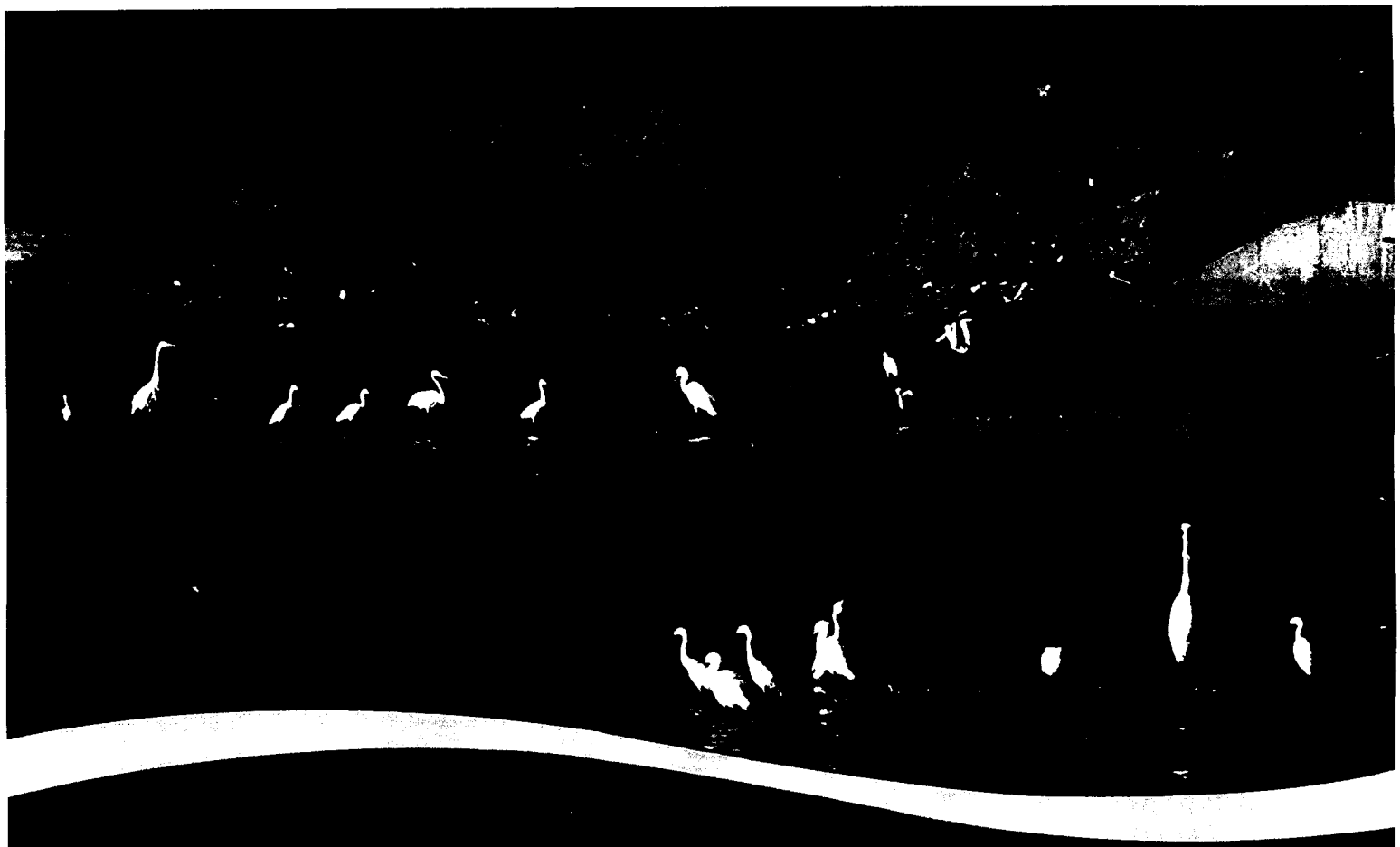
**AIR**
Reduce harmful air emissions from Port activities

**WATER**
Improve the quality of Long Beach Harbor waters

Remove, treat or render suitable for beneficial reuse contaminated soils and sediments in the Harbor District

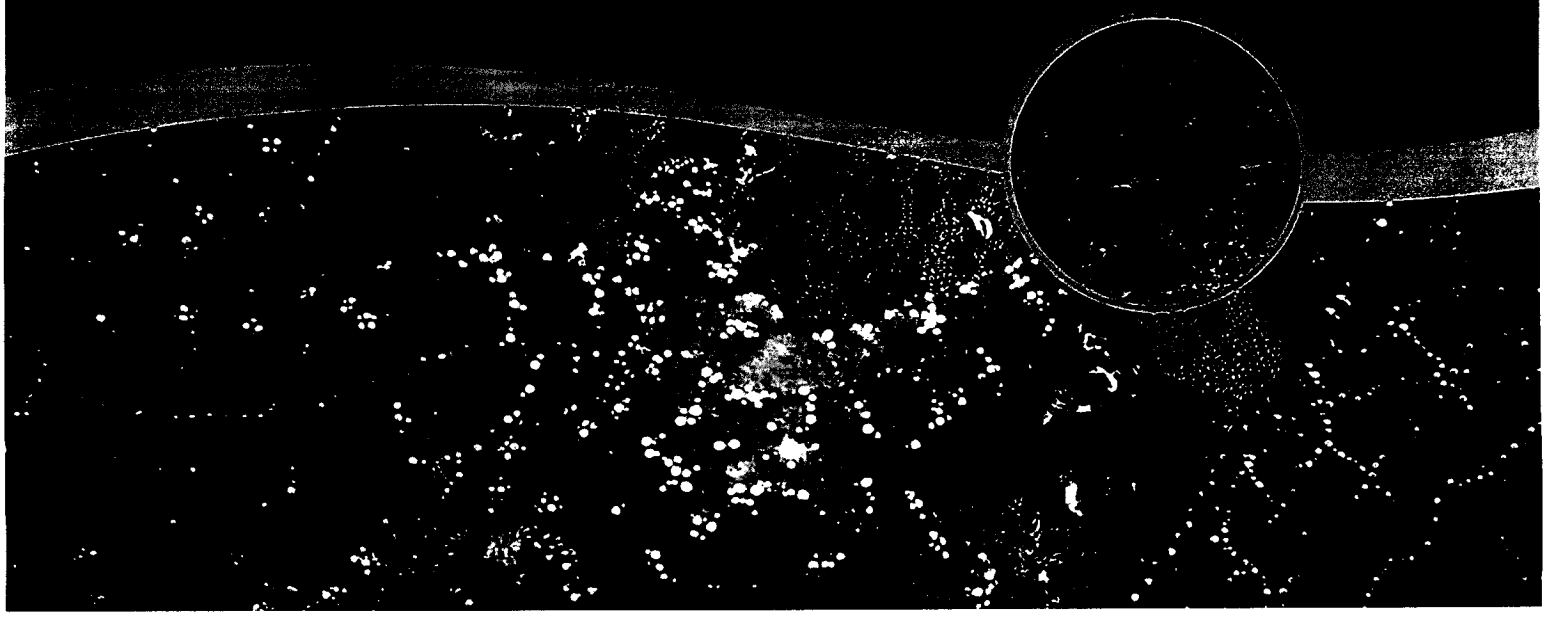
**COMMUNITY ENGAGEMENT**
Interact with and educate the community regarding Port operations and environmental programs

**SUSTAINABILITY**
Implement sustainable practices in design and construction, operations and administrative practices throughout the Port



# WILDLIFE

As maritime trade increases, wildlife in the harbor is forced to share habitat with more ships, trucks and trains. The Port's challenge, as a steward of the natural resources in the harbor, is to ensure that wildlife continues to thrive and that the quality of wildlife habitats is not only maintained but improved wherever possible. The Green Port wildlife programs work in conjunction with federal and state wildlife programs to meet that challenge.



## Program Goal

• PROTECT, MAINTAIN OR RESTORE AQUATIC ECOSYSTEMS AND MARINE HABITATS

The Port monitors wildlife by tracking several indicators of habitat quality, including the abundance of birds and the number of fish species found in the harbor during periodic biological surveys (FIGURES 2 AND 3). For more information on wildlife issues, the Green Port wildlife programs, and other aspects of the Green Port Program, visit the Environment section of the Port's website www.polb.com.

## 2005 Accomplishments

• Funded a Sea Grant publication that describes the harbor environment and documents the improvements in habitat quality and enhancement of wildlife, including the number of fish species in the harbor, in the past 30 years.

• Completed the seventh year of monitoring the results of the Port's relocation of a large black-crowned night heron colony from the former Naval Station to the Navy Mole in 1998.

• Provided an additional $11.4 million towards the Bolsa Chica wetlands restoration project, which will allow the creation of more high-quality wetlands habitat in one of the last Southern California coastal salt marshes.

## In Progress

• Monitoring protected species that could be affected by Port projects, including peregrine falcons, least terns, and black-crowned night herons.

• Providing educational materials concerning ballast water regulations and practices to vessel captains in support of the state and federal invasive species prevention programs.

PHOTOGRAPHS: *(Top left) The Bolsa Chica Wetlands, which has received a total of $50 million in restoration funds from the Port; (Circle left) A young leopard shark at Pier G; (Bottom left) Starfish thrive in harbor waters; (Top right) A protected black-crowned night heron soars across the harbor.*

## Upcoming Activities

• The next harbor-wide biological survey to document the numbers and kinds of marine organisms inhabiting harbor habitats will be conducted in 2006 and 2007.

• The Port, working with Long Beach city officials, local citizens' groups and resource agencies, will examine possible restoration projects at Long Beach's Colorado Lagoon and Rainbow Lagoon.

• The Port will help fund a program by the Long Beach Aquarium of the Pacific to develop an exhibit that will highlight the harbor habitat and show how human activities affect its inhabitants.

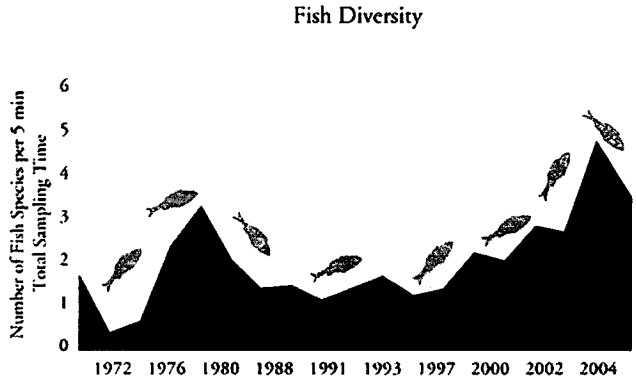



FIGURE 2: Biological surveys have shown improvement in the diversity of fish in Long Beach harbor.

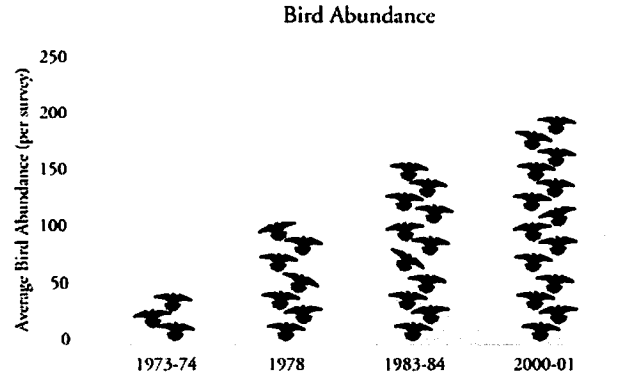
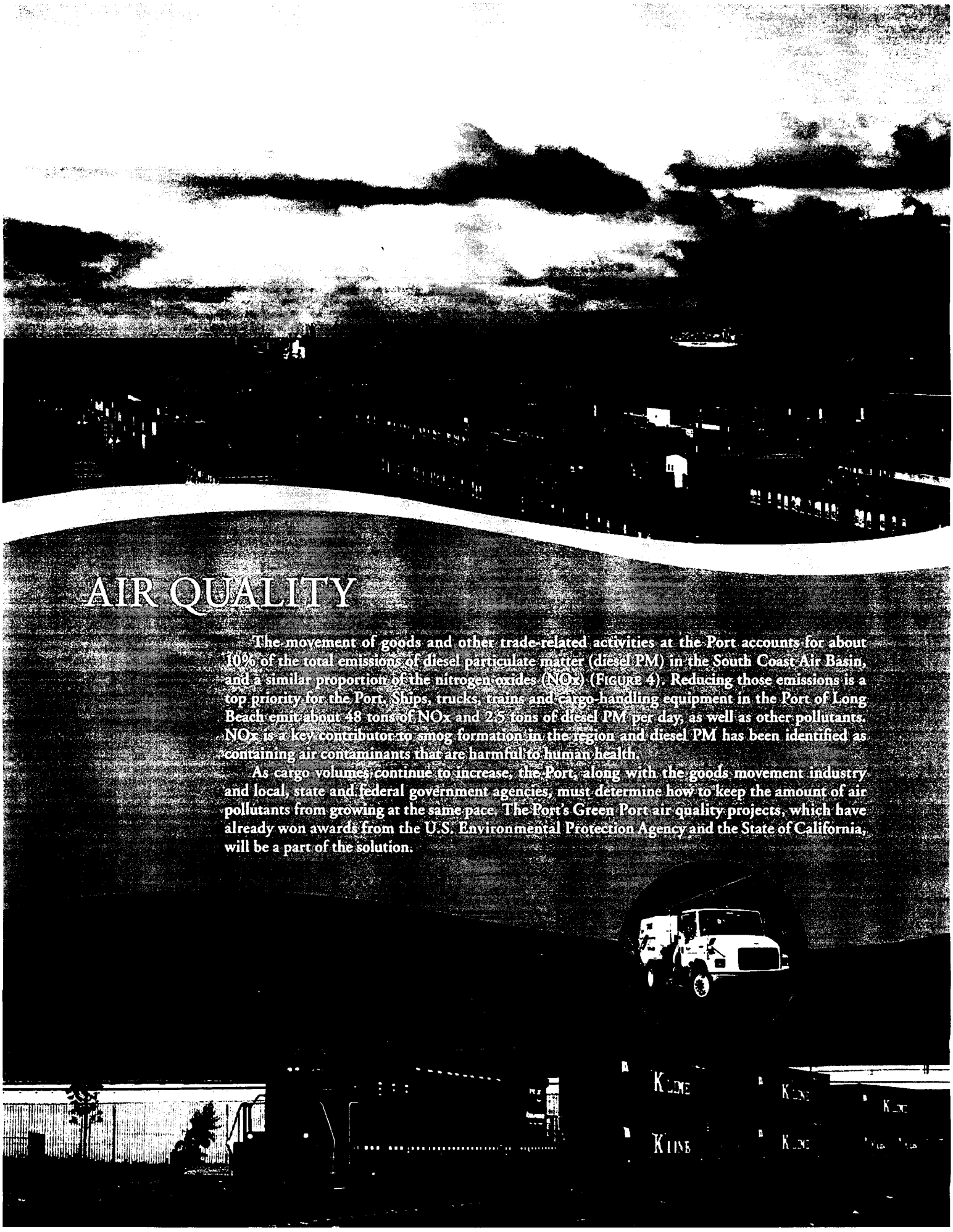



FIGURE 3: The average number of birds at the harbor has more than doubled since the 1970s.



# AIR QUALITY

The movement of goods and other trade-related activities at the Port accounts for about 10% of the total emissions of diesel particulate matter (diesel PM) in the South Coast Air Basin, and a similar proportion of the nitrogen oxides (NOx) (FIGURE 4). Reducing those emissions is a top priority for the Port. Ships, trucks, trains and cargo-handling equipment in the Port of Long Beach emit about 48 tons of NOx and 2.5 tons of diesel PM per day, as well as other pollutants. NOx is a key contributor to smog formation in the region and diesel PM has been identified as containing air contaminants that are harmful to human health.

As cargo volumes continue to increase, the Port, along with the goods movement industry and local, state and federal government agencies, must determine how to keep the amount of air pollutants from growing at the same pace. The Port's Green Port air quality projects, which have already won awards from the U.S. Environmental Protection Agency and the State of California, will be a part of the solution.

## Program Goal

• Reduce air pollution from Port activities

The Port has several methods of measuring progress toward the goals of its air quality projects. These metrics include the amount of pollution emitted by each source category (e.g., ships, trucks, trains, equipment) per unit of cargo handled and the reductions in those emissions. The Port has calculated that metric for cargo-handling equipment and future reports will include all other sources as well. For some programs, specific metrics are not appropriate. For those, the Port will report new developments and activities as they occur.

## Accomplishments in 2005

• Marine Vessels

The Port initiated the Green Flag Incentive Program and dedicated as much as $2.2 million a year toward financial incentives to improve compliance. Identified 333 vessels—more than one-third of the vessels that came to Long Beach in 2005—as having complied with the speed limit on 100% of their trips, making them eligible for a Green Flag (Figure 5).
*Goal: 100% of vessels in compliance with the voluntary Vessel Speed Reduction Program by the end of 2006.*

• Cold-Ironing

With British Petroleum (BP), initiated a voluntary project to install shore-side electrical power at Berth T-121 and wiring and plugs on two BP tankers, which will cold-iron whenever they call Long Beach. This project is projected to reduce emissions by at least 22 tons of NOx and 0.8 tons of diesel PM per year. Initiated a master plan for upgrading the Port's electrical infrastructure to accommodate cold-ironing throughout the Port; the plan will be completed in 2006.
*Goal: To provide electrical infrastructure for shore-side power (cold-ironing) at 100% of container terminals and at other major facilities as appropriate.*

• Cargo-Handling Equipment

The Port and its tenants have reduced emissions from terminal equipment by nearly 600 tons of NOx and more than 70 tons of diesel PM a year compared to 2002, which represent reductions of 24% and 50%, respectively (Figures 6 and 7). This has been accomplished through 1) the Diesel Emissions Reduction Program and 2) accelerated replacement (modernization) of the equipment fleets, and has occurred even while cargo tonnage has increased by 30%. In the emission reduction program, the Port, EPA and the California Air Resources Board spent more than $2 million to retrofit more than 600 pieces of cargo-handling equipment with diesel oxidation catalysts; half of those are using clean diesel fuel.
*Goal: To reduce, by 2010, the emissions per ton of cargo from terminal cargo-handling equipment by 90% compared to 2002 levels. Note: This program has achieved its goal of 100% participation by the major terminals.*

• Locomotives

Committed $5 million (toward a total shared project cost of $23 million) to replace all Pacific Harbor Lines locomotives with cleaner units by 2008, use emulsified diesel and idling controls, and test diesel hybrid and liquefied natural gas locomotives.
*Goal: By 2010, to reduce locomotive emissions by 66% for NOx and 79% for diesel PM per year (corresponding to 226 tons and 5.9 tons, respectively).*

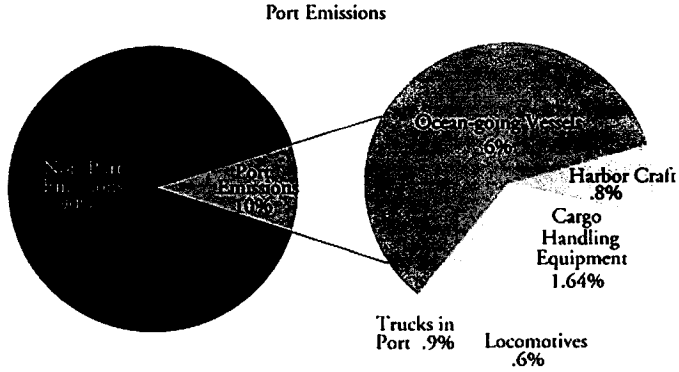



Figure 4: Port-related sources contribute about 10 percent of the region's pollutants, with ships responsible for the majority of Port emissions.

Photographs: *(Left circle) The Port's new street sweepers run on clean liquefied propane gas; (Bottom left) The Green Goat, a new diesel-electric hybrid locomotive; (Top right) The captain and crew of the COSCO Long Beach accept a Green Flag for environmental achievement.*

• PORT VEHICLES

Retrofitted the Port's diesel-powered maintenance equipment to diesel oxidation catalysts and a clean diesel fuel mixed with ethanol, purchased three liquefied petroleum gas (propane)-fueled sweepers, and began replacement of the gasoline-powered fleet with compressed natural gas-powered and hybrid vehicles.

*Goal: To convert 100% of the Port's fleet to cleaner vehicles.*

• AIR MONITORING STATIONS

Authorized $1.1 million to install and operate two air monitoring stations to sample and report via the Port website on air quality, including concentrations of key pollutants; and approved an agreement with the Port of Los Angeles to ensure consistent monitoring throughout San Pedro Bay.

*Goal: To collect and report to the public real-time air-quality data by the end of 2006.*

• COKE DUST FALLOUT

The installation of $34 million worth of new equipment and technology has reduced the proportion of petroleum coke dust in particulate fallout from 21 percent in 1996 to 4 percent in 2005, a reduction of more than 80% (FIGURE 8).

*Goal: To minimize or eliminate petroleum coke fallout from transport, storage and handling operations.*

## In Progress

• VESSEL STACK BLOWS

Harbor Patrol cites vessels emitting excessive smoke. With the adoption of the Green Port Policy, increased enforcement has resulted in increased compliance.

*Goal: To minimize or eliminate incidences of excessive smoke from vessels at berth.*

• GREEN PORT LEASE REQUIREMENTS

The Port has developed, and will incorporate into new and renegotiated leases, new environmental language that will require selected vessels to use shore-side power, exhaust control technology and cleaner fuels at berth. The Port will require terminals to use clean diesel fuel and replace cargo-handling equipment to meet EPA's tougher Tier 4 standards for diesel engines. Negotiations on the first lease incorporating Green Port program elements will be concluded in 2006.

*Goal: To incorporate environmental measures into all new leases.*

• LNG-POWERED CARGO-HANDLING EQUIPMENT

The Port, the U.S. EPA, Long Beach Container Terminal, CALSTART and Sound Energy Solutions have started a project to evaluate the feasibility of LNG-powered terminal equipment, beginning with yard hostlers or tractors. The hostlers have been delivered and the fueling equipment has been installed; the test will be completed in 2006.

*Goal: To determine the operational feasibility of LNG as a fuel for cargo-handling equipment.*

• CLEAN CONSTRUCTION PROGRAM

The Port is requiring contractors to use ultra-low-sulfur diesel in construction equipment and to use electric-powered dredges, and will require cleaner engines, oxidation catalysts, alternative fuels and electric equipment wherever feasible.

*Goal: To maximize the use of clean fuels and low-emission engines in construction equipment.*

PHOTOGRAPHS: *(Left) Diesel oxidation catalysts have been installed on all Port yard hostlers; (Right) Yard tractors fueled by LNG are being tested.*

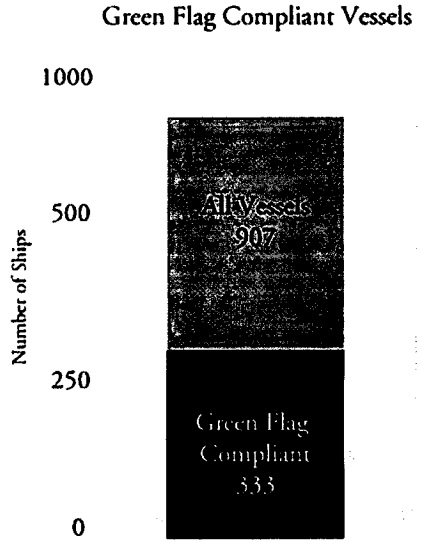
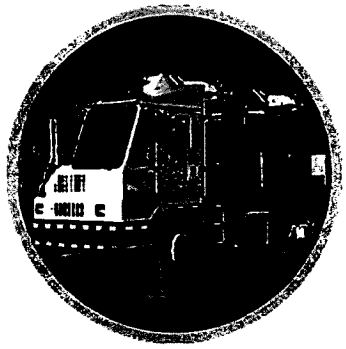



FIGURE 5: More than one-third of the vessels that called Long Beach in 2005 were compliant under Green Flag speed reduction guidelines.



## Upcoming Activities

• Vessel Main Engine Retrofit

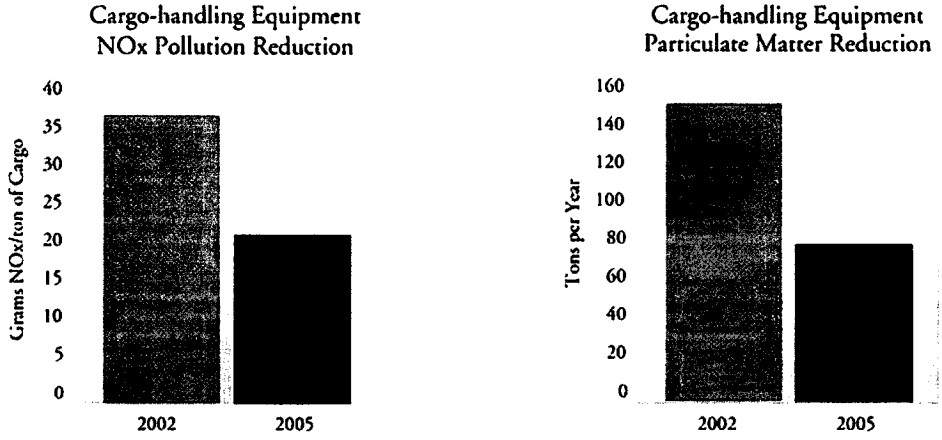
The Port is funding and working with an interagency group that is testing emission control technologies for oceangoing vessel main engines, with the goal of reducing the largest source of diesel PM.

• Port-Wide Emission Inventory

The Port will complete the metrics for the 2002 emission inventory and the 2005 update, as well as the report of the full 2005 update, in 2006. This inventory will allow the Port, the community and regulators to assess the progress of clean air projects and determine the best use of resources to address air quality problems.

• Regional Planning

As a member of an Air Quality Management District Advisory Committee, the Port is helping to develop the region's Air Quality Management Plan.




Figures 6 & 7: The Port's pollution control measures have dramatically cut PM and NOx emissions from cargo-handling equipment.

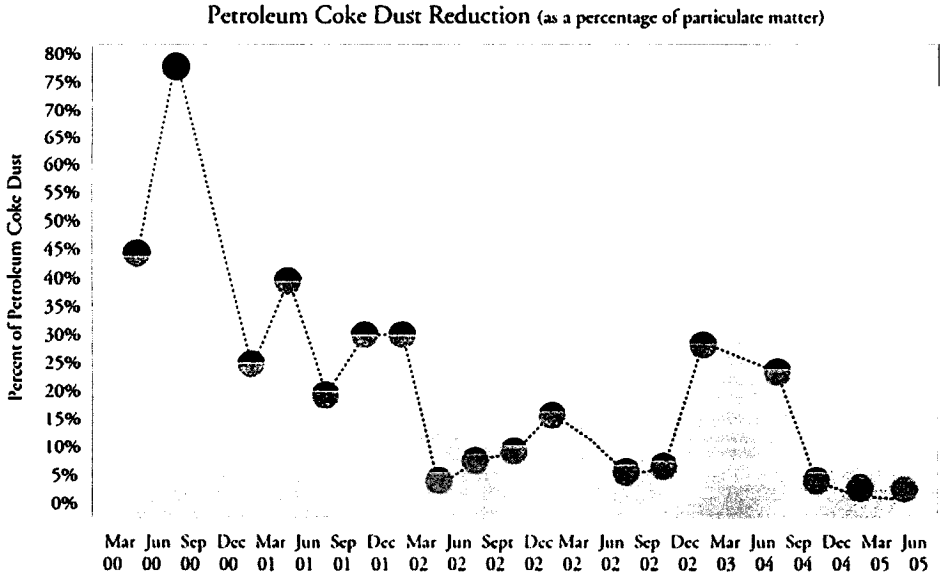
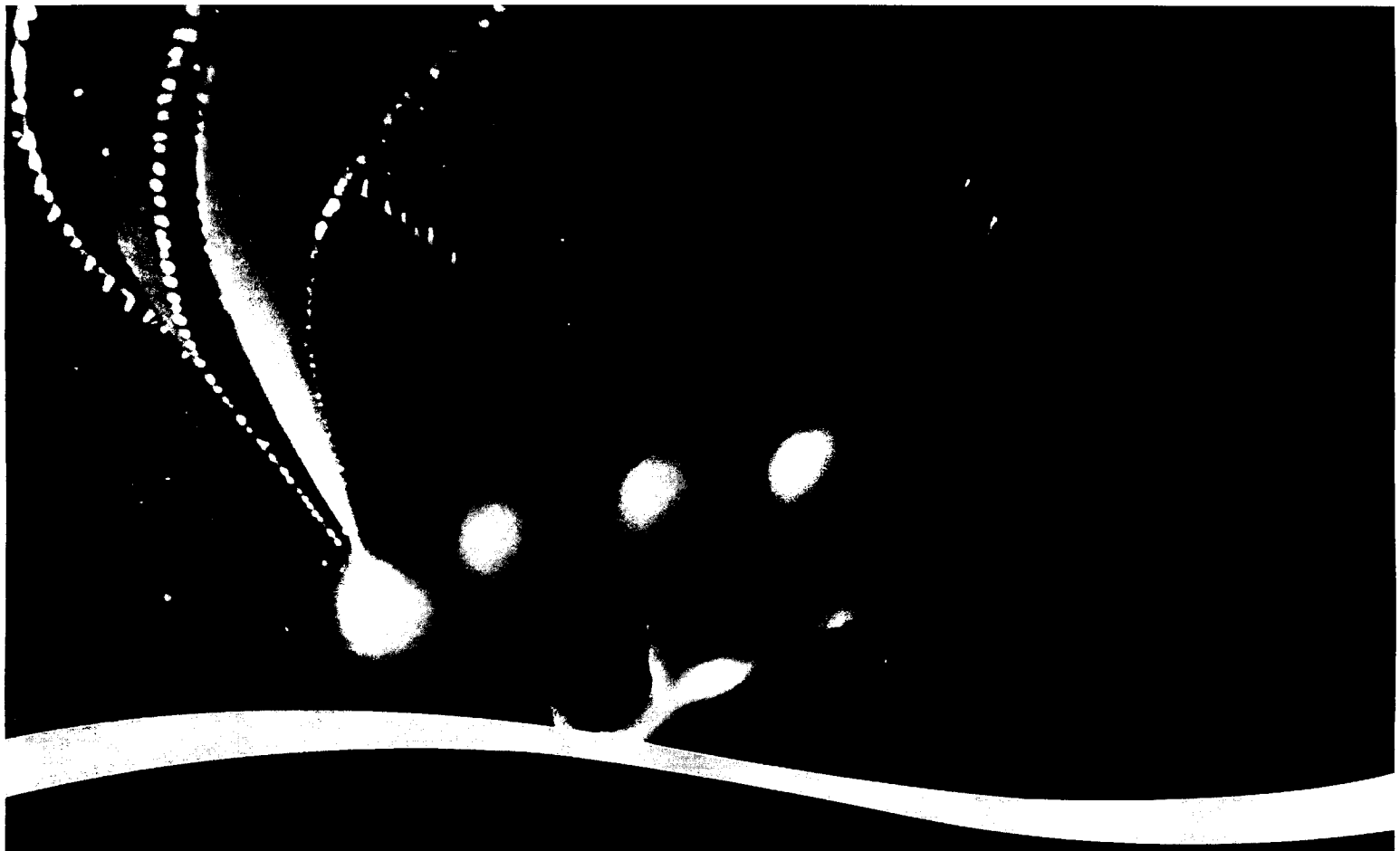
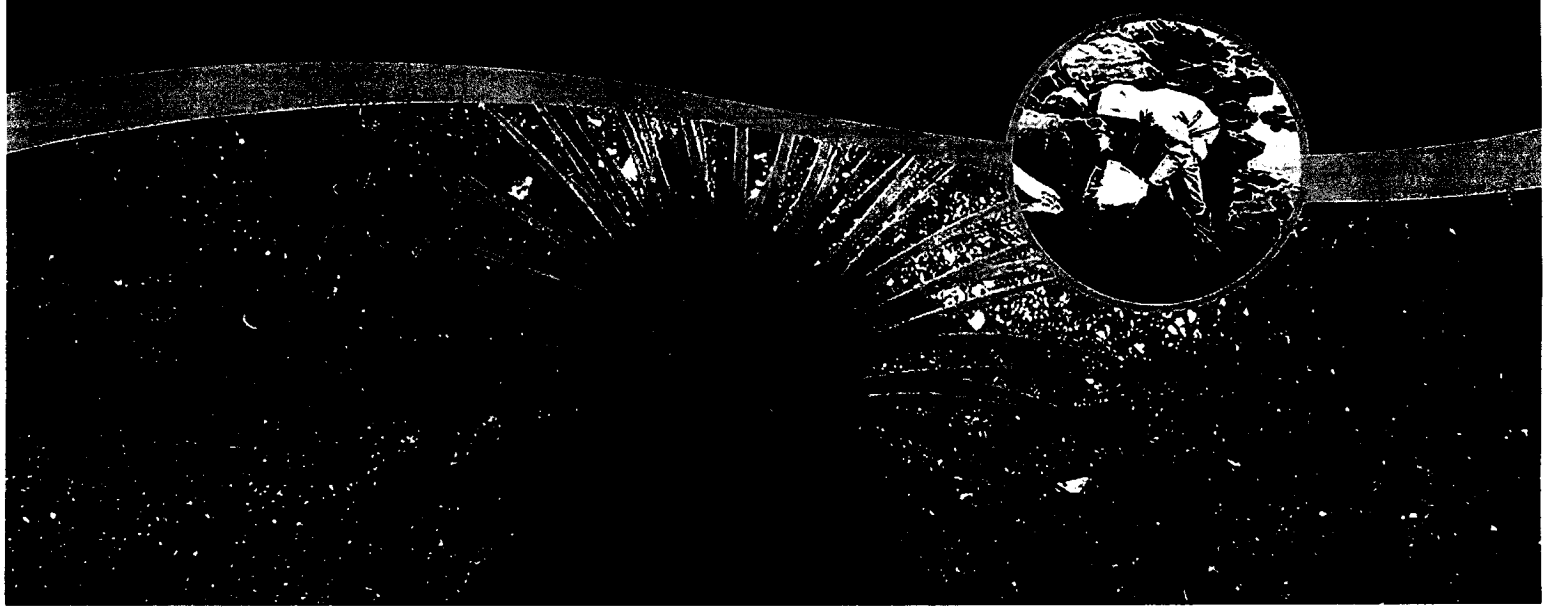


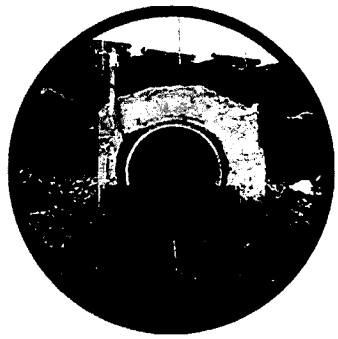

Figure 8: The Port has reduced airborne petroleum coke dust by more than 80 percent.



# WATER QUALITY

Since most of the Port's 3,200 acres of land are paved, storm water drains into the harbor, carrying with it pollutants from terminals, roads and construction sites. In addition, vessel traffic and dredging stir up sediments, some of which may contain pollutants. The Green Port water quality projects protect and improve water quality by managing the activities that can cause water pollution.





## Program Goal

- IMPROVE THE QUALITY OF LONG BEACH HARBOR WATERS

The metric for this program is dissolved oxygen concentrations and water clarity in harbor waters—two key indicators of the quality of the harbor water as a habitat for sea life. While there is no state standard for water clarity, concentrations of dissolved oxygen in the Port have consistently stayed well above 5 mg/L, the minimum that the state's Water Resources Board has deemed healthful for marine waters (FIGURE 9). Port water quality programs are designed to maintain the high quality of harbor waters, and the Port is proud of its award-winning efforts.

## 2005 Accomplishments

- Committed $4.5 million to long-term storm water management and dust control on undeveloped Port properties, and spent $1 million in 2005 installing protection for 87 acres. These controls will minimize runoff into the harbor.

- Removed 400 cubic yards of trash from Port streets and waterways, thereby preventing trash from entering the harbor through the Port's storm drains.

- Began development of a storm water permit compliance tracking system for construction sites.

- Conducted 82 facility inspections under the Master Storm Water Program to verify storm water compliance and management practices by the Port and its tenants.

- Tested automatic remote sampling devices to improve storm runoff sampling and monitoring.

## In Progress

- Incorporating storm water management features, such as the treatment of water flows from industrial areas into new terminals.

- Conducting regular inspections of all Port facilities to ensure compliance with storm water regulations and employ best management practices for minimizing storm water pollution.

- Monitoring water quality around dredging projects to ensure that contaminants do not exceed water quality standards.

## Upcoming Activities

- A Port-funded sampling and monitoring program to support the development of Total Maximum Daily Load pollution limits for the harbor area by the federal EPA and the state Water Board will begin in 2006.

- Automatic storm water sampling devices will be installed at hard-to-sample sites around the Port.

- Application of long-term storm water controls on undeveloped sites will continue in 2006.

- The first of the storm water treatment devices at major Port facilities will be installed in 2006.

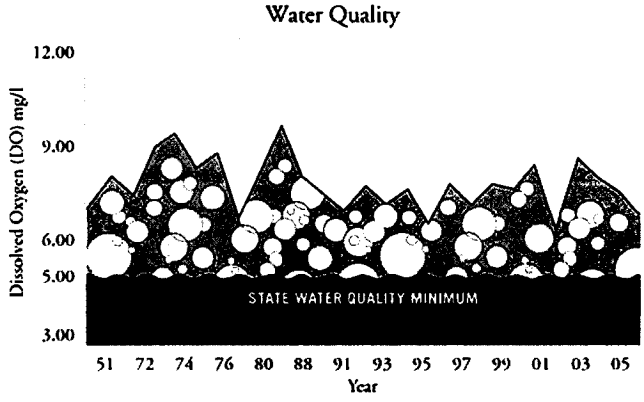



FIGURE 9: Oxygen concentrations, a key measurement of water quality, have remained consistently high in harbor waters.

PHOTOGRAPHS: *(Top left) Visible kelp beds attest to steadily improving water quality at the Port; (Circle left) Water sampling for the Port's award-winning Master Storm Water Program; (Bottom left) Clean water supports a thriving community of sea life; (Top right) Automated sampling helps the Port monitor polluted runoff.*


# SOILS AND SEDIMENTS

Soils and sediments in the Port have been contaminated by past industrial uses, illegal dumping, oil production and pollution entering the harbor through storm drains and rivers. The Port must manage any polluted material on land and in harbor sediments so as to protect site workers, the community and the environment, and to ensure that the pollution is not simply shifted elsewhere. The Port's projects return contaminated areas to productive use in a safe, responsible manner — a process of beneficial reuse known as "brownfield redevelopment."

In the past 10 years the Port, working closely with state and local regulatory agencies, has removed nearly 200,000 tons of contaminated soils and sediments from the environment and disposed of them in approved landfills and recycling facilities. Several million more tons of soils and sediments have been treated on-site and isolated deep inside Port lands, in accordance with state and federal standards, to remove them from contact with air, water and people.

## Program Goal

• REMOVE, TREAT AND RENDER SUITABLE FOR BENEFICIAL REUSE CONTAMINATED SOILS AND SEDIMENTS IN THE HARBOR DISTRICT.

The Port's goal is to remove all of the contamination that has been identified in the Port's land and sediments by 2010 and at the same time protect workers, the public and ecosystems in the Port. Our metric to measure progress will be the cumulative total removed to date, which will be reported every year (FIGURES 10 AND 11). Hazardous material abatement does not have a numerical goal because those materials are addressed as they are encountered.

## 2005 Accomplishments

• SOIL REMEDIATION

Completed the action plan for the clean-up of the Pier A West oil field property and signed an agreement with the Department of Toxic Substances Control (DTSC) to fund preparation of the environmental review document.
*Goal: To remove 100% of identified contaminated soils by 2010.*

• SEDIMENT REMEDIATION

Disposed of 6,000 tons of sediment (undersea soil) and debris from maintenance dredging in the Back Channel, bringing the total of contaminated sediments safely re-used or disposed of to nearly half the amount known to exist in harbor waters; signed an agreement with the state Department of Toxic Substances Control (DTSC) and started the design and environmental analysis for the cleanup of the last of the Navy's West Basin contaminated sediments. *Goal: To remove 100% of identified contaminated sediments by 2010.*

• HAZARDOUS MATERIALS ABATEMENT

Completed an assessment of asbestos in an old warehouse and initiated the abatement; the Port will removed hundreds of tons of asbestos and dispose of it safely.

## In Progress

• Institutional controls such as deed restrictions are being implemented to protect the public from contact with contaminants left in place by the Navy, energy companies and approved by the DTSC.

• Contaminated sediments from the West Basin are being reused as structural material underneath the new Pier T terminal, thereby isolating contaminants from the environment.

PHOTOGRAPHS: *(Top left) Vessel traffic (Pier A) can stir up sediments, some of which may contain pollutants from past industrial activity; (Circle left) The Port's EPA award-winning Slip 2 Fill project isolated 1 million cubic yards of contaminated sediments; (Bottom left) Healthy soil supports a variety of sea plants.*

• Contaminated ground water is being monitored at sites around the Port to ensure it does not migrate to harbor waters.

• Pre-construction surveys of land, sediments and buildings are being conducted to ensure that hazardous wastes are identified and managed appropriately.

## Upcoming Activities

• Complete conceptual design of the West Basin sediment cleanup project and begin preparation of the environmental document; this project represents the final step in the cleanup of contamination left behind on the former Naval Complex.

• Complete the design of Pier A West remediation; the Department of Toxic Substances Control will oversee cleanup.

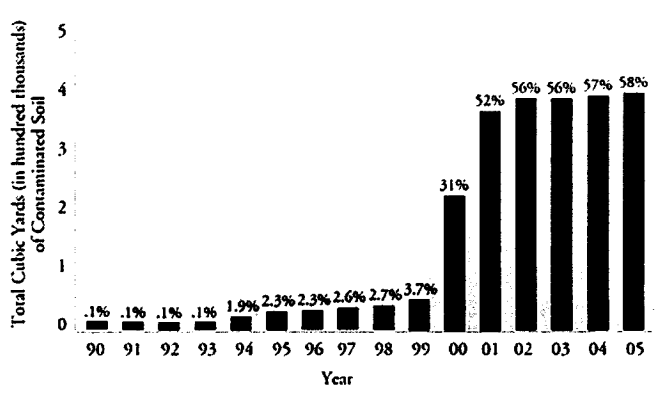



FIGURE 10: The Port has removed from contact with the environment more than half of all known contaminated soil.

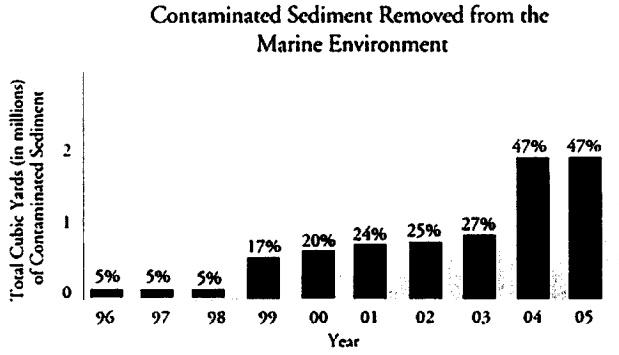
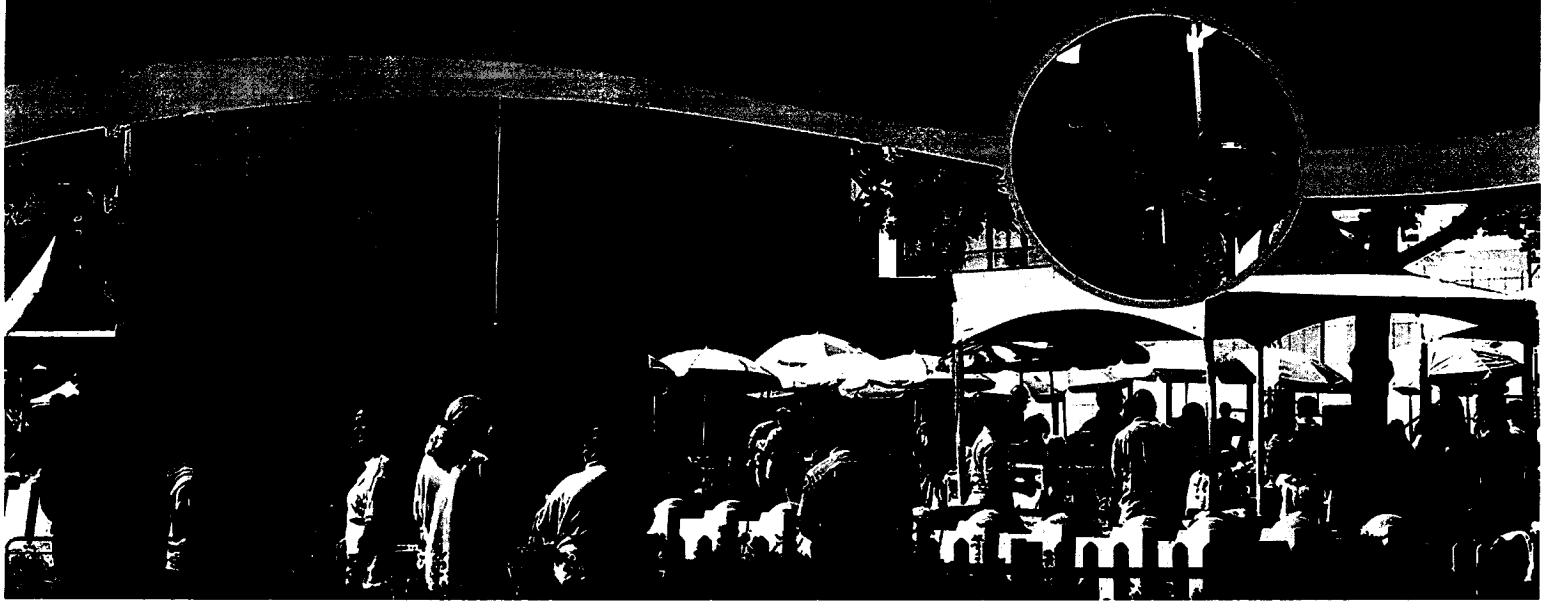



FIGURE 11: The Port expects to finish removing or treating all known contaminated sediment (undersea soil) by 2010.

# COMMUNITY ENGAGEMENT

As the Port of Long Beach continues to develop its environmental protection and enhancement programs, the Port needs to increase the community's understanding of the Green Port programs, and to help raise the overall level of environmental awareness and involvement among the residents of Long Beach and surrounding communities.



## Program Goal

- INTERACT WITH AND EDUCATE THE COMMUNITY REGARDING PORT OPERATIONS AND ENVIRONMENTAL PROGRAMS

Numerical goals and metrics are not applicable to the Community Outreach element; instead, the Green Port program will report on community outreach activities as they occur.

## 2005 Accomplishments

- Held the first Green Port Open House, attended by more than 2,000 members of the public, at which the Port, its customers and local agencies highlighted how Green Port projects are addressing the Port's goals.

- Designed and produced a Green Port brochure describing the program's structure and goals, which was distributed at the Open House.

- Harbor Arbor Program—Interviewed City Council and community leaders to identify candidate projects; selected two as initial projects. Goal: To beautify Long Beach and provide an air quality benefit through the planting of trees at strategic locations.

- Began production of a cable television program "Pulse of the Port," which aired its first show on the Green Port Open House. The program now airs regularly on Long Beach Channel 8, Charter Communications.

- Expanded the circulation of the Re:Port quarterly community newsletter from 50,000 to 170,000 households.

## In Progress

- Evaluating a goods movement component to the City's upcoming youth employment enhancement program.

- Meeting with Long Beach Unified School District to consider a Goods Movement Academy in Long Beach high schools.

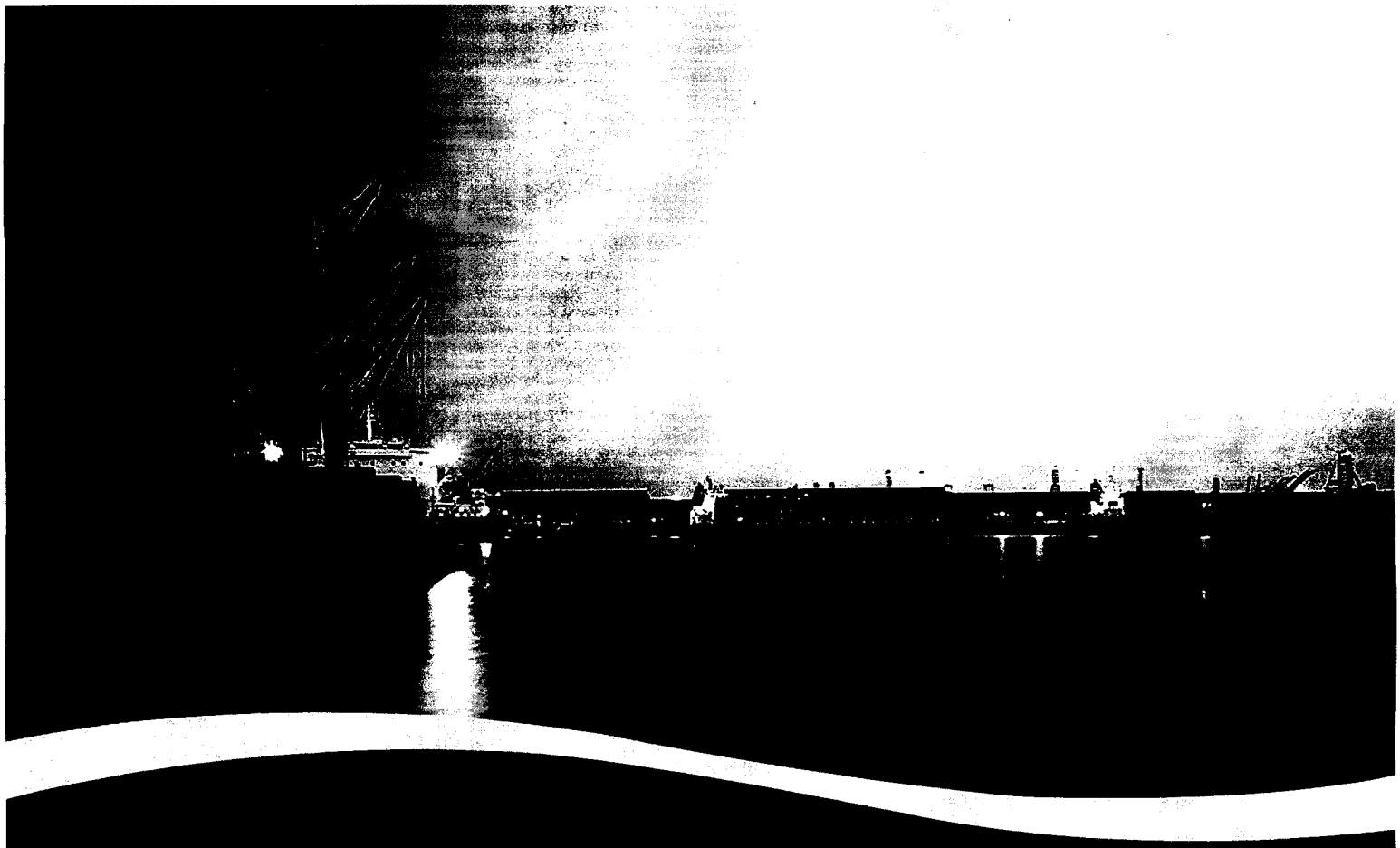
## Upcoming Activities

- The Communications Division will report on the Green Port Program as part of the Re:Port publication and other communications media.

- Two initial Harbor Arbor projects will begin spring 2006.

- The Communications Division will complete its survey of existing education-related programs and activities and will prepare a list of recommended activities for implementation by the Port.

PHOTOGRAPHS: *(Top left) Young visitors learn more about harbor operations and the environment during a Port-sponsored harbor tour; (Circle left) Long Beach Port Harbor Patrol officer interacts with students on career day; (Bottom left) More than 2,000 visitors attended the first Green Port Open House; (Circle right) The Port has expanded the circulation of its community newsletter, Re:Port.*



# SUSTAINABILITY

The Green Port Policy directs the Port to integrate sustainable practices into Port development and operations by actively promoting an organizational culture of environmental protection and enhancement. This culture extends to Port staff as well as the Port's customers. Benefits will include preservation of natural resources, reduction of pollution, conservation of energy and curtailment of waste, increases in the use of renewable and recyclable materials, and overall reduction of the Port's impact on the environment.

## Program Goal

- IMPLEMENT SUSTAINABLE PRACTICES IN DESIGN AND CONSTRUCTION, OPERATIONS AND ADMINISTRATIVE PRACTICES THROUGHOUT THE PORT.

In achieving this goal, Port staff will develop policies and procedures that will promote long-term ecological health, economic vitality and community integrity. The Sustainability element of the Green Port program does not have numerical goals or metrics; instead, progress will be reported as it occurs.

## 2005 Accomplishments

- Formed the Sustainability Task Force, consisting of Port staff, to examine all aspects of Port operations and improve environmental performance; authorized $874,000 to fund the task force's activities in 2006.

- Applied for the American Association of Port Authority's Environmental Management System, which will help establish sustainable practices in Port purchasing and maintenance functions.

- Established in-house teams to evaluate landscaping, water conservation, recycling and disposal practices for sustainability principles.

- Developed a draft Action Plan for incorporating sustainability principles into Port development and operations.

- Helped bring into operation the PierPASS OffPeak truck gate program, which has reduced peak-hour truck traffic by nearly 35%.

## In Progress

- Management teams are producing a training video and training program for Port staff, developing a tenant education and outreach program, and producing an in-house newsletter on sustainability.

- The Task Force action teams evaluate all Port activities to identify opportunities for the Port to reduce waste, curtail consumption and increase recycling.

- The Engineering Division incorporates Green Building principles into new building design through its Leadership in Energy and Environmental Design (LEED) certification program.

## Upcoming Activities

- The Sustainability Task Force will complete the Action Plan and begin implementation of the Plan throughout the Port.

- The Port will support the start-up of the Virtual Container Yard program in 2006, so that empty containers can be exchanged on-line, outside the Port.

- The Port's Environmental Control Program, a requirement for companies leasing land in the Harbor District, will be expanded and refined to ensure that it incorporates Green Port Program principles.

# Looking Ahead

The Port of Long Beach has a long history of undertaking environmental programs in fulfillment of its responsibilities as a steward of the natural resources in the Harbor District. The Green Port Program has established the framework on which the Port will continue to refine and expand its environmental and community outreach programs. Because these programs will be a multi-year effort, the Port will continue to report the results to the Board of Harbor Commissioners, Long Beach City Council and the public.

*"With the Green Port Program we have embarked upon a new course, driven by the ethics of sustainability and community responsibility, to bring our environmental protection and enhancement efforts to a new level. I am proud of what we have already accomplished and I know I will be proud of what we will accomplish in the future through the Green Port Program."*

—ROBERT KANTER, PH.D.
PORT OF LONG BEACH
DIRECTOR OF PLANNING AND ENVIRONMENTAL AFFAIRS

# SUSTAINABLE PRINTING

The Long Beach Board of Harbor Commissioners has adopted a Green Port Policy that calls for the Port of Long Beach to promote "sustainability"—the idea that we will meet current needs without compromising the ability of future generations to meet their needs.

This year, the inside pages of the Green Port Annual Report were printed on Forest Stewardship Council-certified Mohawk Options White Smooth text—a 100 percent post-consumer recycled paper manufactured entirely with wind energy. This is paper made entirely of recycled papers and other products that have already been used by consumers. This paper is also Green Seal certified.

The cover is printed on Fraser Genesis Snow Smooth cover, which is made from 100 percent de-inked post consumer waste and exceeds all guidelines for recycled fiber and post-consumer content as set forth by the U.S. Environmental Protection Agency and each of the 50 states.

We printed the Annual Report with sustainable soy ink made from non-toxic soybean oil rather than standard petroleum-based inks.

We are proud that this is an environmentally friendly Annual Report.

# ANNUAL REPORT STAFF

The 2005 Green Port Annual Report was produced under the direction of Dr. Robert Kanter, the Port Director of Planning and Environmental Affairs.

Writers: Dr. Thomas Johnson, Ed Rogan, John Pope

Graphic Designer: Jennifer Kubel

Thanks to the entire Port staff for their contributions to the Green Port programs.

## FOREWORD

To effectively integrate common goals for air quality in the South Coast Air Basin, the staff of the Port of Los Angeles (POLA) and the Port of Long Beach (POLB) have worked together to develop the initial San Pedro Bay Ports Clean Air Action Plan. The Ports have had extensive dialog with the staff of the South Coast Air Quality Management District, the California Air Resources Board, and the United States Environmental Protection Agency Region IX regarding air quality goals and appropriate control measures to achieve such goals. This groundbreaking draft plan reflects the input of those agencies and is now ready for public review and comments. Modifications will likely occur as a result of such review.

This plan is the first of its kind in the country, linking the emissions reduction efforts and visions of the two largest ports in the United States with similar efforts and goals of the regulatory agencies in charge of ensuring compliance with air quality standards. The collaborative effort will continue in the years to come with the review and update of the Clean Air Action Plan on an annual basis.

The air agencies have extensively reviewed and commented on the draft plan, support the collaborative process that has been established, and support of the goals delineated in the plan pending public review. By participating in the development and annual review of this plan, these regulatory agencies do not waive or forfeit their rights or obligations to continue to regulate emissions sources under their control. Participation in this process is voluntary by all parties and does not in any way inhibit or preclude agencies from any legal authorities and responsibilities to meet federal, state, and local air quality standards. Participation does not mean that the agencies necessarily endorse each of the measures and concepts proposed in the plan.

## INTRODUCTION

This document is the first San Pedro Bay Ports Clean Air Action Plan. This joint Clean Air Action Plan describes the measures that the Ports of Los Angeles and Long Beach will take toward reducing emissions related to port operations. In March 2006, a groundbreaking meeting occurred at the highest level between the two Ports and the South Coast Air Quality Management District (SCAQMD) where all parties expressed the need to work jointly toward solutions. Shortly thereafter, the Ports engaged the California Air Resources Board (CARB) and the United States Environmental Protection Agency Region IX (EPA) in the spirit of cooperation to help the Ports develop this Clean Air Action Plan. It should be emphasized that these entities have committed to continuing their efforts associated with the development, review, implementation, update/revision of the plan on an annual basis.

## HISTORY

In the early 1900s, the State conveyed the Port tidelands to Los Angeles and Long Beach, as trustees for the people of the State of California, to accommodate and promote harbor commerce, navigation and fisheries. The Ports are landlord ports; they build terminal facilities and lease them to shipping lines and stevedoring companies. The Ports do not operate the terminals, ships, yard equipment, trucks or trains that move the cargo. However, the Ports are determined to accelerate the effort to reduce air pollution from "goods movement" activities using all the powers available to them.

The San Pedro Bay Ports comprise a huge regional and national economic engine. The Los Angeles Customs District accounts for approximately $300 billion in annual trade. More than 40% of all containerized trade in the nation flows through the San Pedro Bay Ports. Economic forecasts suggest that the demand for containerized cargo moving through the San Pedro Bay region will more than double by the year 2020.

## THE CHALLENGE

The San Pedro Bay Ports are located in the South Coast Air Basin (SoCAB). This Basin has some of the worst air quality in the nation, which represents a major health concern for its residents. Much of this air quality problem is attributable to the fact that the SoCAB is the second largest urban area in the nation (with all its associated emissions sources) and to the existence of topographical and meteorological conditions that enhance the formation of air pollution. Currently, the SoCAB is designated by the EPA as being in nonattainment of the National Ambient Air Quality Standards (NAAQS) for ozone and for particulate matter less than 2.5 microns ($PM_{2.5}$). The ozone nonattainment level is rated "severe-17," with an attainment deadline year of 2021. The $PM_{2.5}$ attainment deadline is 2015.

In addition, CARB has designated the exhaust from diesel-fueled engines as a toxic air contaminant, with diesel particulate matter (DPM) as a surrogate for total emissions. The EPA also lists diesel exhaust as a mobile source air toxic. According to CARB, about 70 percent of the potential cancer risk from toxic air contaminants in California can be attributed to DPM. Therefore, the concentration of DPM in communities has become a major public health concern and the focus of CARB and SCAQMD regulations.

In 2000, the SCAQMD released results from its second Multiple Air Toxics Exposure Study (MATES II), which raised concerns about the impact of emissions from ships, trucks and trains in the vicinity of the Ports and major transportation corridors. Since then, both Ports have had terminal development plans challenged and delayed due to concerns about the adequacy of environmental mitigation.

In order for the SoCAB to attain the NAAQS, and to protect public health, immediate action is necessary to significantly reduce emissions from all sectors, including "goods movement." Several port-related sources are subject to aggressive regulations yet, still fall short of the levels needed to accommodate growth while protecting public health. Recently, CARB undertook several actions targeted at reducing emissions from goods movement activities. These actions include:

- Ultra low sulfur diesel (ULSD) fuel requirements for on-road and off-road diesel engines fueled within the SoCAB
- Emissions standards for cargo handling equipment (CHE)
- Statewide Memorandum of Understanding between CARB and line haul railroads

In addition to the focus on DPM, oxides of nitrogen (NOx) and oxides of sulfur (SOx) greenhouse gases (such as carbon dioxide, methane, etc.) are an important consideration when evaluating emissions from mobile sources, since they potentially affect public health on a global level. While the immediate purpose of this Clean Air Action Plan is to address emissions that affect public health on a local basis, certain proposed measures will result in a decrease in greenhouse gas emissions.

Both Ports have adopted and are implementing a wide range of new environmental initiatives. These efforts include better documentation of environmental impacts and more detailed evaluation of effective mitigation measures. The Ports are cognizant of the view of environmental groups, local residents and regulatory agencies that not enough is being done to address port-related air quality issues. The Ports are also aware of the views of port users and operators that inconsistent or conflicting environmental measures could have unintended and even counterproductive effects.

## THE VISION

The Ports recognize that their ability to accommodate the projected growth in trade will depend upon their ability to address adverse environmental impacts (and, in particular, air quality impacts) that result from such trade. The Clean Air Action Plan is designed to develop mitigation measures and incentive programs necessary to reduce air emissions and health risks while allowing port development to continue.

The Ports are determined to accelerate ongoing efforts to reduce air pollution from all modes of goods movement through the San Pedro Bay Ports. The Clean Air Action Plan is not only built upon the Ports' previous air quality mitigation efforts, but also on the efforts of the regulatory agencies, business stakeholders and concerned residents. This plan incorporates their concepts and control measures while establishing a new vision for port-related goods movement.

The Ports are pleased to note that from preliminary emissions inventory estimates for 2005, current emission levels from cargo handling equipment are lower than 2001/2002 levels. But having noted this encouraging progress, both Ports recognize that there is still a significant amount of work to be done.

The Ports share the goal of reducing air pollution from port operations to acceptable regulatory health risk thresholds. The Ports take responsibility to implement the measures in this plan. The generally accepted health risk threshold for individual projects is a 10 in 1,000,000 additional cancer risk. It is recognized that the standardized modeling used to measure this risk is imperfect. Therefore, the Clean Air Action Plan is multi-faceted. The Clean Air Action Plan includes stringent San Pedro Bay-wide standards that achieve real emissions reductions; a nested set of implementation strategies; investment in the development and integration of new/cleaner technologies into port operations; and creating a comprehensive monitoring and tracking program that will document progress on all of these elements.

The Ports also acknowledge the reality that reducing pollution to near zero levels would require massive conversion to electric, fuel cell or hydrogen vehicles, which are not yet commercially available for all applications. However, there are low-emissions technologies commercially available that slash pollution up to 90% from the 2004 on-road heavy-duty exhaust emissions standards. The Ports also recognize that the extensive scope of emission reductions necessary to achieve the goals envisioned in this plan will require more than a 5-year period to fully implement. This highlights the need for the plan to be adopted in 2006, and for aggressive implementation to commence with strong commitments by both Ports.

## THE PLAN

The Clean Air Action Plan consists of the following eight elements:

- Standards and Goals
- Implementation Strategies
- Control Measures
- Technology Advancement Program
- Infrastructure & Operational Efficiency Improvements Initiative
- Estimated Emissions Reductions
- Estimated Budget Requirements
- Recommendations

This document represents a staff-prepared draft overview of the plan that is a work in progress. Staff intends to take a final plan to the respective Boards of Harbor Commissioners in September 2006 with incorporation of suggestions from agencies, tenants, and the public. In the meantime, current emissions reduction programs will be continued and some of the new initiatives included in the plan will be initiated before September 2006.

The plan is based on the following principles:

(1) The Ports will work cooperatively to implement these strategies.
(2) The Clean Air Action Plan, although built upon past efforts, will be continually updated and improved.
(3) The Ports will be open to new technologies and other advancements to accelerate meeting the vision expressed above.
(4) The Ports will achieve an appropriate fair share of necessary pollutant emission reductions which are cost effective and feasible.

Tenants, railroads, and the trucking industry will be expected to "sign-on" and participate in the Clean Air Action Plan beginning January 1, 2007. Before January 1, 2007, the Ports will work with tenants and the railroads to assist them in developing their own programs to meet the plan's standards. These groups will be asked for a written explanation as to how they intend to meet or surpass the goals of the plan. The Ports are committed to working with industry stakeholders to assure speedy action.

While many of the control measures are based in large part on the work of the No Net Increase Task Force, the Green Port Policy, and other initiatives, the Ports will remain open to innovative ideas that will achieve the same or better results.

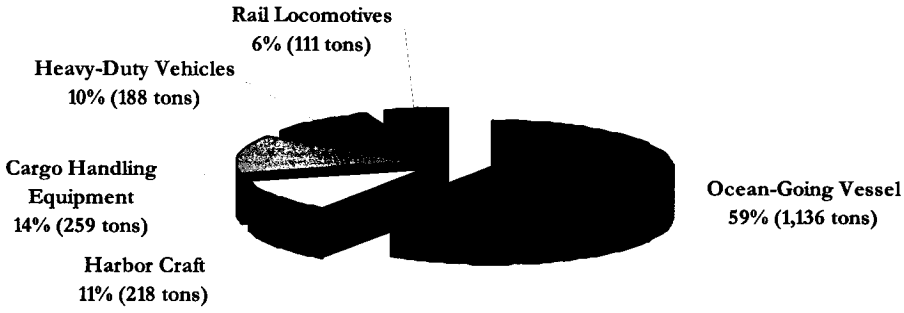
The movement of goods by heavy-duty trucks from the Ports through local communities is an extraordinary challenge because it involves thousands of truck owner/operators who do not

have the financial resources to acquire cleaner trucks on their own. The Ports are adopting a goal that will eliminate "dirty" trucks from the San Pedro Bay terminals within 5 years from adoption of this plan. The Ports will therefore work with all concerned parties to establish new relationships and business paradigms that will help secure the necessary funding to make this important transition. The Ports will also pursue "Green Container Transport" systems that can transport containers with "Green Power" to inland destinations so that, over time, the Ports can move toward a pollution-free transport system for goods movement.

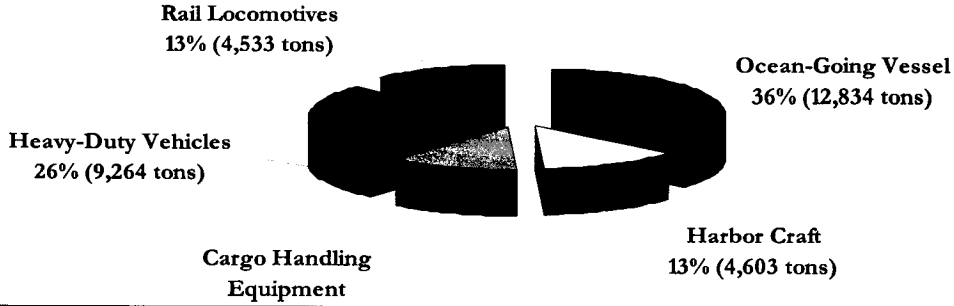
## EMISSIONS BY SOURCE CATEGORY

Both Ports are currently updating their 2005 emissions inventory by source category. Based on the baseline year emissions inventories for both Ports (Port of Los Angeles 2001, Port of Long Beach 2002), the contribution of emissions by the five port-related source categories (Heavy-Duty Vehicles (HDV or trucks), Ocean-Going Vessels (OGV or cargo ships), Cargo Handling Equipment (CHE), Harbor Craft (HC), and Railroad Locomotives (RL)) are shown on the following charts.

**Baseline Year DPM Emissions Contributions by Source Category**




**Baseline Year NOx Emissions Contributions by Source Category**



## THE STANDARDS

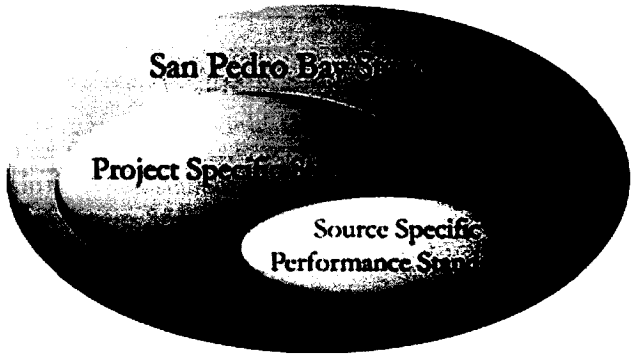
The principles upon which this plan is based set forth extremely ambitious goals for port-related goods movement. From the vision of reducing port-related health risk and the principles stated previously, it is the Ports' goal to establish standards at the following three levels:

(1) **San Pedro Bay Standards**
- Reduce public health risk from toxic air contaminants associated with port-related mobile sources to acceptable levels.
- Prevent port-related violations of the state and federal ambient air quality standards at air quality monitoring stations at both ports.
- Reduce criteria pollutant emissions to the levels that will assure that port-related sources contribute their "fair share" to enable the South Coast Air Basin to attain state and federal ambient air quality standards.

(2) **Project Specific Standards –** Projects must meet the 10 in 1,000,000 excess cancer risk threshold, as determined by health risk assessments conducted during California Environmental Quality Act (CEQA) review and implemented through required CEQA mitigations associated with lease negotiations. Projects that exceed the AQMD CEQA significance thresholds for criteria pollutants must implement the maximum available controls and feasible mitigations for any emissions increases.

(3) **Source Specific Performance Standards –** A series of standards that will be met through port lease requirements, tariffs, incentives, and market-based mechanisms as outlined below.

Compliance with the Project Specific Standards may require that an individual terminal go beyond the Source Specific Performance Standards or advance the date of compliance with those performance standards. The relationships between these three standards are illustrated below.



The Source Specific Performance Standards are targeted at the five source categories of mobile equipment and vessels that are part of port-related goods movement. The Source Specific Performance Standards proposed by the plan are:

**HEAVY- DUTY VEHICLES/TRUCKS**

- ✓ By the end of 2011, all trucks calling at the ports frequently or semi-frequently will meet or be cleaner than the EPA 2007 on-road PM emissions standards (0.01 g/bhp-hr for PM) and be the cleanest available NOx at the time of replacement or retrofit.

**OCEAN-GOING VESSELS**

- ✓ 100% compliance with the Vessel Speed Reduction Program [initially out to a distance of 20 nautical miles (nm) from Point Fermin, and expanded to 40 nm].
- ✓ The use of 0.2% or lower sulfur Marine Gas Oil (MGO) fuel in vessel auxiliary and main engines at berth and out to a distance of 20 nm from Point Fermin, and expanded to 40 nm, or equivalent reduction.
- ✓ The use of shore-power (or equivalent) for hotelling emissions implemented at all major container, selected liquid bulk, and cruise terminals in POLA within five years and at all container terminals and one crude oil terminal in POLB within five to ten years (the implementation time difference being due to the Port of Long Beach's more extensive infrastructure development schedule).
- ✓ The use of NOx and PM control devices on auxiliary and main engines mandated on new vessel builds and existing frequent callers.

**CARGO HANDLING EQUIPMENT**

- ✓ Beginning 2007, all Cargo Handling Equipment (CHE) purchases will meet one of the following performance standards:
  - Cleanest available NOx alternative-fueled engine, meeting 0.01 g/bhp-hr for PM, available at time of purchase, or
  - Cleanest available NOx diesel-fueled engine, meeting 0.01 g/bhp-hr for PM, available at time of purchase.
- ✓ By the end of 2011, all remaining CHE will meet the EPA Tier 4 engine standards.

**HARBOR CRAFT**

- ✓ By the second year of the plan, all Harbor Craft (HC) home-based at San Pedro Bay Ports will meet EPA Tier 2 for harbor craft or equivalent reductions.
- ✓ By the fifth year, all previously repowered HC home-based at San Pedro Bay Ports will be retrofitted with the most effective CARB verified NOx and/or PM emissions reduction technologies.

- ✓ When Tier 3 engines become available, within five years all HC home-based at San Pedro Bay Ports will be repowered with the new engines.

**RAILROAD LOCOMOTIVES**

- ✓ By 2008, all existing switch engines in the Ports shall be replaced with Tier 2 engines equipped with 15-minute idling devices and shall use emulsified fuels as available.
- ✓ By 2011, all diesel-powered line-haul locomotives entering the San Pedro Bay Ports shall meet or be cleaner than EPA Tier 2 rail standards, with use of after-treatment controls and Ultra Low Sulfur Diesel (ULSD).
- ✓ Any new switch engine acquired after the initial Pacific Harbor Line replacement must meet EPA Tier 3 standards or equivalent to 3 grams NOx/bhp-hr and 0.023 g PM/bhp-hr.
- ✓ Any new rail yard developed at the San Pedro Bay Ports, or any rail yard significantly redesigned, shall be required to operate the cleanest locomotive technologies currently available (alternative fueled locomotives, hybrid, electric, multi-engine generator set, etc.), use yard equipment meeting the cargo handling equipment standards specified above, and will be serviced only by the cleanest commercially available heavy-duty trucks meeting or exceeding the EPA 2007 on-road emissions standards.

## IMPLEMENTATION

The Ports have evaluated numerous implementation strategies for the proposed standards, extensively reviewed options, and evaluated several scenarios. The strategies that have been evaluated to date are:

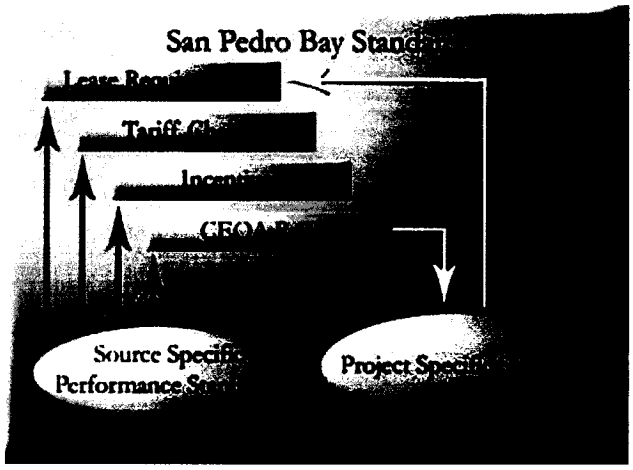
- ➢ Lease Requirements
- ➢ Tariff Changes
- ➢ CEQA Mitigations
- ➢ Incentives
- ➢ Voluntary Measures
- ➢ Credit Trading
- ➢ Capital Lease Backs
- ➢ Government-Backed Loan Guarantees for Trucks

The most effective combination of implementation strategies identified at this time is a mix of lease requirements, tariff changes, CEQA mitigations, and incentives. This combination provides redundancy in implementing the Source Specific Performance Standards should any one of the other specific strategies fail to be applied. Tariff changes offer an opportunity to affect a broader range of tenants but have potential implementation issues. Lease requirements

may be able to go further than tariffs, but requirements can generally only be negotiated when the lease is reopened, such as when:

- ✓ A terminal change/modification triggers an EIR
- ✓ A new lease is sought
- ✓ An existing lease comes up for renewal

The following flow diagram illustrates how the Source Specific Performance Standards and the Project Specific Standard will be implemented, and how the performance and project standards are related.



The following table presents the Port of Los Angeles' major leases, expiration dates, and currently anticipated upcoming Board action dates related to Environmental Impact Reports and/or leases.

| Land Use | Grantee | Term of Agreement | Date Expires | Anticipated Board Action |
|---|---|---|---|---|
| Container | POLA Container Terminal (berths 206-209) | vacant | vacant | within 5 years |
| Container | Eagle Marine Services, Ltd. | 30 Years | 12/31/2026 | 7/1/2011 |
| Container | APM Terminals Pacific, Ltd | 25 Years | 7/31/2027 | not in 5 yr period |
| Container | China Shipping Holding Company, Ltd. | 25 Years | NEW | 11/1/2006 |
| Container | Evergreen Marine Corporation, LTD. | 32 Years | 12/31/2028 | 7/1/2007 |
| Container | TraPac | 15 Years | 9/30/2002 | 6/1/2006 |
| Container | Yang Ming Marine Transport Corporation, Ltd. | 20 Years | 10/10/2021 | 8/1/2007 |
| Container | Yusen Terminals Inc. | 25 Years | 9/30/2016 | 8/1/2007 |
| Passengers/Sup Com. | Pacific Cruise Ship Terminals, LLC | 18 Months | 6/30/2005 | within 5 years |
| Automobile | Distribution & Auto Services, Inc. | | | n/a |
| General Cargo | Rio Doce Pasha Terminal, L.P. (berths 174-181) | 15 Years | 12/31/2000 | 11/1/2006 |
| General Cargo | Stevedoring Services of America (berths 54-55) | 10 Years | 10/31/2009 | 12/1/2009 |
| Dry Bulk | Hugo Neu-Proler Company | 30 Years | 8/30/2024 | not in 5 yr period |
| Dry Bulk | Los Angeles Export Terminal Corporation | 35 Years | 8/30/2032 | n/a |
| Liquid Bulk | Equilon (berths 167-169) | 35 Years | 2/11/2023 | not in 5 yr period |
| Liquid Bulk | Exxon Mobil Corporation (berths 238-240) | 25 Years | 12/31/2015 | not in 5 yr period |
| Liquid Bulk | Pacific Energy Marine Oil (pier 400) | TBD | NEW | 12/1/2006 |
| Liquid Bulk | ConocoPhillips (berths 148-151) | | holdover | 12/1/2007 |
| Liquid Bulk | Ultramar (berth 164) | 25 Years | 1/1/2001 | 9/1/2006 |
| Liquid Bulk | Vopak (berths 187-191) | 38 Years | 8/29/2023 | not in 5 yr period |
| Liquid Bulk | Westway Terminal Company, Inc. (berths 70-71) | 30 Years | 3/23/2025 | not in 5 yr period |
| Liquid Bulk | GATX Tank Storage (berths 118-119) | 25 Years | 4/13/2013 | unknown |
| Liquid Bulk | Amerigas (berth 120) | | holdover | 12/1/2007 |
| Liquid Bulk | Valero (berth 163) | 20 Years | 6/24/2014 | not in 5 yr period |

The following table presents the Port of Long Beach's major leases, expiration dates, and currently anticipated upcoming Board action dates.

| Land Use | Grantee | Term of Agreement | Date Expires | Anticipated Board Action |
|---|---|---|---|---|
| Container | PCT | 20 Years | 4/30/2022 | not in 5 yr period |
| Container | SSAT - Pier C | 20 Years | 4/30/2022 | 5/15/2006 |
| Container | SSAT Long Beach - Pier A | 25 Years | 10/21/2027 | not in 5 yr period |
| Container | TTI | 25 Years | 8/11/2027 | not in 5 yr period |
| Container | CUT | 30 Years | 6/30/2009 | 12/1/2007 |
| Container | LBCT | 25 Years | 6/30/2011 | 12/1/2007 |
| Container | Pier S | tbd | new lease | 8/31/2007 |
| Container | ITS | 34 Years | 8/31/2006 | 5/22/2006 |
| Auto | Toyota | 16 Years | 12/31/2006 | 12/31/2006 |
| Break Bulk | Cooper/T. Smith | 20 Years | 12/31/2008 | 12/31/2008 |
| Break Bulk | Crescent Terminals | 15 Years | 6/30/2015 | 10/1/2006 |
| Break Bulk | Fremont | 40 Years | 4/30/2036 | not in 5 yr period |
| Break Bulk | Catalyst Paper (USA) Inc. | 3 Years | 8/31/2008 | 8/31/2008 |
| Break Bulk | Pacific Coast Recycling | 25 Years | 11/13/2019 | not in 5 yr period |
| Break Bulk | Weyerhaeuser | 36 Years | 1/31/2011 | 1/31/2011 |
| Dry Bulk | BP West Coast Products | 40 Years | 12/31/2009 | 12/31/2009 |
| Dry Bulk | CEMEX Pacific Coast Cement | 40 Years | 8/31/2021 | not in 5 yr period |
| Dry Bulk | Koch Carbon | 40 Years | 12/31/2027 | not in 5 yr period |
| Dry Bulk | Marsulex | 20 Years | 5/31/2005 | 12/31/2006 |
| Dry Bulk | MMC (Mitsubishi) | 33 Years | 6/13/2022 | not in 5 yr period |
| Dry Bulk | Metropolitan Stevedore | 35 Years | 3/31/2016 | not in 5 yr period |
| Dry Bulk | Morton | 15 Years | 7/31/2005 | 12/31/2006 |
| Dry Bulk | NGC | 60 Years | 11/30/2024 | not in 5 yr period |
| Dry Bulk | G-P Gypsum | n/a (private) | n/a (private) | n/a (private) |
| Dry Bulk | Oxbow (East) | 20 Years | 11/3/2019 | not in 5 yr period |
| Dry Bulk | Oxbow (Pad 14) | 31 Years | 6/30/2021 | not in 5 yr period |
| Dry Bulk | Oxbow (South) | 32 Years | 6/30/2021 | not in 5 yr period |
| Dry Bulk | Oxbow (West) | 41 Years | 12/31/2027 | not in 5 yr period |
| Liquid Bulk | BP/ARCO | 40 Years | 5/30/2023 | 8/31/2007 |
| Liquid Bulk | ATSC | 20 Years | 12/31/2014 | not in 5 yr period |
| Liquid Bulk | BP Terminal 3 | n/a (private) | n/a (private) | n/a (private) |
| Liquid Bulk | World Oil | n/a (private) | n/a (private) | n/a (private) |
| Liquid Bulk | Baker Commodities | n/a (private) | n/a (private) | n/a (private) |
| Liquid Bulk | Chemoil | 36 Years | 6/30/2010 | 10/31/2007 |
| Liquid Bulk | Equilon (Shell) | 40 Years | 10/31/2006 | 12/31/2006 |
| Liquid Bulk | Petro-Diamon | 20 Years | 9/30/2022 | not in 5 yr period |
| Liquid Bulk | VOPAK | n/a (private) | n/a (private) | n/a (private) |

## FUNDING

The standards being set forth in this plan will require significant funding beyond what the Ports can provide. Port's funding will be focused on performing infrastructure improvements; assisting in the turnover of owner/operator- and fleet-owned trucks with alternative fueled/

clean diesel trucks; and investing in a Technology Advancement Program. The SCAQMD has committed to provide funding in 2006, and has further proposed to continue to fund the plan through the next five fiscal years. The estimated range of funding for the Clean Air Action Plan (for the various scenarios) is $194 million to $2.6 billion.

Even with the significant commitment of funding from both Ports and the SCAQMD, a sizeable infusion of additional funding will be required to execute the plan just to ensure turnover of the frequent-caller truck fleet (trucks that call at the Ports seven or more times per week).

The California Legislature recently passed a long-awaited infrastructure bond package that includes monies for port infrastructure and trade related air quality improvements. If approved by California voters this November, these funds could be used to supplement Port and SCAQMD funding. Both the regulatory agencies and the Ports will need to push for the required additional funding through legislative solutions and public awareness of the issues.

## THE CONTROL MEASURES & INITIATIVES

The broad range of control measures and initiatives included in the plan are:

- SPBP-HDV1: Performance Standards for On-Road Heavy Duty Vehicles
- SPBP-HDV2: Alternative Fuel Infrastructure for On-Road Heavy Duty Vehicles
- SPBP-OGV1: Vessel Speed Reduction
- SPBP-OGV2: Reduction of At-Berth Ocean-Going Vessel Emissions
- SPBP-OGV3: Ocean-Going Vessel Auxiliary Engine Fuel Improvement Standards
- SPBP-OGV4: Ocean-Going Vessel Main Engine Fuel Improvement Standards
- SPBP-OGV5: Ocean-Going Vessel Main Engine Emissions Improvements
- SPBP-CHE1: Performance Standards for Cargo Handling Equipment
- SPBP-HC1: Performance Standards for Existing Harbor Craft
- SPBP-RL1: Rail Switch Engine Modernization
- SPBP-RL2: Operational Controls for Line Haul Railroads
- SPBP-RL3: Clean Rail Yard Standards
- Construction Standards
- Technology Advancement Program
- Infrastructure and Operational Efficiency Improvements Initiative
- Port of Los Angeles China Shipping Settlement

Details of the individual control measures and initiatives are provided in the San Pedro Bay Ports Clean Air Action Plan Technical Report. However, further explanation on the heavy-duty vehicle and shore power measures are included in this Overview document.

Many of the measures proposed in the Clean Air Action Plan advance the requirements and implementation of upcoming regulations, as did several of the NNI measures. Non-regulatory NNI measures have been incorporated into the Clean Air Action Plan control measures. Regulatory NNI measures are part of the on-going regulatory programs implemented by the federal, state, and local agencies and are the responsibility of those agencies. The following table details how each San Pedro Bay Ports Clean Air Action Plan measure relates to the 38 non-regulatory NNI control measures.

| SPBP Measure # | New Control Measure/Program Name | Non Regulatory NNI Measures |
|---|---|---|
| SPBP-HDV1 | Performance Standards for On-road Heavy-Duty Vehicles | HDV3, HDV10 HDV12, HDV14 |
| SPBP-HDV2 | Alternate Fuel Infrastructure for On-Road HDVs | |
| SPBP-OGV1 | Vessel Speed Reduction | OGV2, OGV15 |
| SPBP-OGV2 | Reduction of At-Berth OGV Emissions | OGV3, OGV16 |
| SPBP-OGV3 | OGV Auxiliary Engine Fuel Improvement Standards | OGV4, OGV11 |
| SPBP-OGV4 | OGV Main Engine Fuel Improvement Standards | OGV9, OGV12 |
| SPBP-OGV5 | OGV Main Engine Emissions Improvements | OGV7, OGV13, OGV14 |
| SPBP-CHE1 | Performance Standards for CHE | CHE2, CHE3, CHE4, CHE5, CHE7, CHE8 |
| SPBP-HC1 | Performance Standards for Harbor Craft | HC9, HC10 |
| SPBP-RL1 | Rail Switch Engine Modernization | R5, R6 |
| SPBP-RL2 | Operational Controls for Line Haul Railroads | R7, R10, R11 |
| SPBP-RL3 | Clean Rail Yard Standards | R7, R10, R11 |
| | Technology Advancement Program | HDV13, HDV14, HDV18, HDV19, OGV7, OGV13, OGV14, HC3, HC7, R7, R9, R12 |
| | POLA China Shipping Settlement | CHE6, HC5 |

### HEAVY-DUTY VEHICLES (TRUCKS)

By far, the single most challenging component of the Clean Air Action Plan will be the implementation and funding associated with the mass turnover of frequent-caller trucks (and ultimately all trucks) calling at both Ports in order to meet the proposed "clean truck" standards. On-road heavy-duty diesel vehicle (truck) travel is an integral part of port operations, moving containers from the Ports into the SoCAB and beyond. The focus of the measures addressing

HDVs is the replacement or upgrade of all frequent and semi-frequent caller trucks, and all older (Model Year 1993 and older) trucks that call at the Ports.

In order to accelerate the emission reductions from the heavy-duty truck sector, the Ports are proposing an extensive fleet modernization program currently focused on two paths: alternative fuels and cleaner diesel. To highlight the importance of this strategy in achieving near-term emission reductions, the Ports and SCAQMD are proposing to commit over $200 million during the next five years to replace and retrofit heavy-duty trucks (or finance the replacement and retrofit). The current cost projections (detailed in the San Pedro Bay Ports Clean Air Action Plan Technical Report) call for a total investment from all funding sources of just over $1.7 billion on HDV replacements or upgrades (installation of emission controls) over the five-year period covered by the plan.

This measure focuses on making significant emissions reductions improvements to the approximately 16,300 individual frequent- and semi-frequent-caller trucks that account for around 80% of all truck visits at the Ports. Several scenarios were developed (these are detailed in the Technical Report and its appendices). The scenario selected for planning purposes (Budget Scenario 7) calls for all frequent-caller trucks and semi-frequent-caller trucks Model Year (MY) 1992 and older to be replaced (with either new alternative fuel or cleaner diesel engines), and semi-frequent-caller trucks MY1993 to MY2003 to be at a minimum retrofitted with DPM and NOx reduction equipment. The Ports envision tackling this measure using several potential approaches, including incentives to replace trucks; lease requirements to require the use of "clean trucks"; a green lane program to expedite clean trucks; a medallion program to limit "dirty trucks"; tariff changes; or a sliding fee mechanism that favors "clean trucks."

The next steps include releasing a request for proposals on an alternative fueling and maintenance station (currently underway); and development of a specific list of projects suitable for bond funding, finalizing measure implementation details (fleets and owner/operator), purchase or financing of "clean trucks," construction and operation of the station, etc.

**SHORE POWER**

Another primary focus of the plan is reducing the emissions from ocean-going vessels (OGV) during hotelling (tied up at berth transferring cargo) at terminals. Both Ports currently have separate and distinct programs. However, they share a common ultimate goal of moving all container berths, cruise ship operations, selected tanker operations, and other frequent vessel types calling in the San Pedro Bay to shore power, and to move other vessel types toward alternative emissions reduction technologies that achieve equivalent reductions.

The Plan focuses on two primary approaches for reducing at-berth emissions: shore power (transferring the electrical generation needs for OGV while at berth from onboard diesel-electric

generators to the cleaner shore-side power grid, which generates power through regulated/controlled stationary sources) and hotelling emissions reduction requirements through alternative technologies, for ships that do not fit the shore power model. Finally, both Ports will also build plugs-ins so that all future port dredging can be accomplished using electric dredges.

The Port of Los Angeles' program for shore power is called Alternative Maritime Power (AMP™), and the Port of Long Beach's program is referred to as shore-side power or cold ironing. With regards to shore power, the Ports are in significantly different positions from an infrastructure standpoint. The Port of Los Angeles generally has the main electrical trunk lines in place from which to "step-down" and condition power for ships. The Port of Long Beach, however, needs to bring trunk lines down from Interstate 405 into the port to supply the appropriate power. This will likely require additional time for implementation.

Over the next five years, the Port of Los Angeles will conduct a massive infrastructure improvement program to make AMP™ available at a number of berths at container, selected liquid bulk terminals, cruise terminals, and dredge plug-in locations. The following draft table presents the berths at the Port of Los Angeles that are currently planned to be improved and operational by the end of the fifth year of the Clean Air Action Plan.

| Site | Number of Berths | Date Operational |
|---|---|---|
| B90-93 (Cruise Terminal) | 2 Berths (2 Vessels) | Jan 2008 |
| B100-102 (CS) | 1 Completed, 1 To Go | Jan 2009 |
| B121-131 (WBCT) | 2 Berths | Jul 2010 |
| B136-147 (TraPac) | 2 Berths | Jul 2009 |
| B175-181(Pasha) | 1 Berth | Jan 2011 |
| B206-209 (LTT) | 1 Berth | Jan 2011 |
| B212-218 (YTI) | 1 Berth | Dec 2006 |
| B224-236 (Evergreen) | 1 Berth | Jan 2008 |
| Pier 300 (APL) | 1 Berth | Jan 2011 |
| Pier 400 (APM) | 1 Berth | Jan 2011 |
| Pier 400 (Liquid Bulk) | 1 Berth | Jan 2009 |
| **Total AMP'd Berths** | **15 Berths** | |

Note: LTT – Long Term Tenant

Over the next five years, the Port of Long Beach currently plans to have crude oil Berth T121 and six container berths operational with shore power. In addition, the Port will be undergoing a massive electrical infrastructure improvement program to bring main trunk lines down from Interstate 405, and complete infrastructure improvements for the remaining container terminals, electric dredge plug-ins, and additional infrastructure for electrification of certain types of yard equipment. The following table presents the berths at the Port of Long Beach that will be improved and operational by the end of the fifth year.

| Site | Number of Berths | Date Operational |
|---|---|---|
| Pier C (Matson) | 1 Berth | Jan 2011 |
| Piers D, E, F (Middle Harbor) | 1 Berth | Sept 2011 |
| Pier G (ITS) | 2 Berths | Jan 2011 |
| Pier S | 2 Berths | Sept 2011 |
| Pier T, berth T121 (BP) | 1 Berth | 4th qtr 2007 |
| **Total Shore Power Berths** | **7 Berths** | |

The Port of Long Beach has committed to providing cold-ironing infrastructure at all container and one crude oil terminal within the next five to ten years. However, the Port does not anticipate the opportunity, through facility redevelopment or master lease renewal, in the next five years to incorporate cold-ironing infrastructure at the facilities identified below, including Pier H where the City of Long Beach serves as the landlord. The Port is committed to expeditiously work with the leaseholders and City of Long Beach, and if necessary take other actions, to install cold-ironing infrastructure as soon as possible. The potential additional locations are listed below.

| Site | Number of Berths | Date Operational |
|---|---|---|
| Pier A | 1 Berth | 2011-2016 |
| Pier H (Carnival) | 1 Berth | 2011-2016 |
| Pier J | 1 Berth | 2011-2016 |
| Navy Mole (Sea-Launch) | 2 Berths | 2011-2016 |
| Pier T (TTI) | 1 Berth | 2011-2016 |
| **Total Shore Power Berths** | **6 Berths** | |

Both Ports are also exploring the purchase of "Green Power" for their respective shore power programs.

For vessels that do not fit the shore power model, hotelling emission reductions will be required through alternative technologies that achieve equivalent emissions reductions. These alternative technologies are in various states of development from design to operational. Examples of these alternative technologies include exhaust gas scrubbing technologies (capture vessel stack emissions while at berth and remove pollutants from exhaust streams either on-shore or on a barge); emerging emissions reduction technologies (such as sea water scrubbers, selective catalytic reduction, etc.); and shore-powered dockside electrical pumps for tankers which reduce onboard pumping loads (generally these onboard pumps are driven by steam power).

Some of these technologies can potentially achieve equivalent emissions reductions of shore power, while others have the potential for significant reduction of hotelling emissions.

## TECHNOLOGY ADVANCEMENT PROGRAM

Another significant initiative of the Clean Air Action Plan is the Technology Advancement Program, which will evaluate, demonstrate, and incorporate new strategies into the suite of control measures that will ultimately result in significant reductions of DPM, NOx, and other criteria pollutants. This initiative builds on the success and synergies of the San Pedro Bay Ports, CARB, SCAQMD, US EPA, tenants, and other stakeholders working together to find joint solutions. Several successful projects have occurred over the years between these entities, and this program would help to build on those early successes. A coordination committee will be established consisting of funding partners that include both Ports, SCAQMD, CARB, and the US EPA. Other stakeholders may become involved in relation to specific projects, as approved by the coordination committee. There are fundamental areas in which the program will focus its initial work:

- Source Category Reductions
- "Green Container Transport" Solutions
  - ✓ Heavy-duty hybrid trucks
  - ✓ Shuttle systems including magnetic levitation, linear induction motors, etc.
  - ✓ Others as identified and developed
- Emissions Inventory Improvements

The program will be primarily funded by both Ports and the participating agencies. Projects will be developed and implemented under each of the areas listed above. Successful demonstration projects will then be incorporated into the next annual update of the Clean Air Action Plan as control measures or additional emissions reduction strategies.

## INFRASTRUCTURE AND OPERATIONAL EFFICIENCY IMPROVEMENTS INITIATIVE

This initiative identifies projects at the San Pedro Bay Ports that improve infrastructure and operational efficiencies that have an added air quality benefit. The initiative includes, but is not limited to:

- Focus on on-dock vs. near-dock rail infrastructure
- Grade separations
- Optical character recognition (OCR) gates at terminals
- Terminal cargo handling/configuration efficiency improvements
- Radio Frequency Identification (RFID)
- Virtual Container Yards

The emissions reduced by these projects would be quantified and reported in emissions inventory updates.

## CLEAN AIR ACTION PLAN TRACKING AND MONITORING

The Ports will track, monitor, and demonstrate the progress of the Clean Air Action Plan. In addition, both Ports will enhance existing monitoring programs to encompass the breadth of actions proposed in the Clean Air Action Plan. These enhancements include:

- Expanding the Bay-wide ambient air quality monitoring network to monitor actual air pollution concentrations in and around the San Pedro Bay Ports.
- Updating the Bay-wide air emissions inventories annually to track control measure compliance and emissions benefits.
- Tracking Clean Air Action Plan progress, expenditures, reductions, etc., in a comprehensive database for each Port.
- Using agency approved protocols, the Port of Los Angeles will develop a port-wide health risk assessment in coordination with the air agencies.

Monitoring and tracking of the plan will initially take place either monthly or quarterly (depending on the control measure/program). Results will be briefed to each Port's Board and a detailed annual overall progress reporting of the San Pedro Bay Ports Clean Air Action Plan will also be reported to the Boards and published. The metrics that are tracked and reported

will be reviewed annually and adjusted, added to, or removed as needed for greater clarity and accuracy.

## SAN PEDRO BAY PORTS CLEAN AIR ACTION PLAN RESULTS

The Clean Air Action Plan will result in significant emission reductions over the course of its five-year timeframe. By the end of the five-year period covered by this initial plan, emissions of diesel particulate matter from heavy-duty trucks will be reduced by approximately 80%, from ocean-going vessels by approximately 35%, and from cargo handling equipment by approximately 19%. From all port related sources, particulate matter emissions will be reduced by more than 50%. These reductions are over and above the effects of recently enacted state regulations affecting ocean-going vessels and cargo handling equipment. The percentage reductions are based on what would be emitted in the absence of a plan – that is, they are not compared with a specific period in the past but instead, are focused on the reductions achievable in the years shown.

The reductions of emissions from ocean-going vessels and cargo handling equipment will occur in conjunction with ARB's coast-wide vessel fuel improvement regulation and their cargo handling equipment rule. Overall, by the end of the five-year period it is estimated that DPM emissions will be reduced by at least 1,200 tons per year and NOx emissions will be reduced by over 12,000 tons per year from port-related sources in the SoCAB over uncontrolled conditions. Similarly, significant reductions of emissions of other pollutants will also be achieved.

In order to evaluate the effectiveness of the CAAP, the plan has been compared with two other emission reduction plans prepared for the region: ARB's Goods Movement Plan (GMP) and the City of Los Angeles' No Net Increase (NNI) strategies applied to both ports. To do this, ARB's estimates of emissions and emissions growth in the SoCAB related to international goods movement (prior to consideration of GMP reductions) were used to represent the growth of San Pedro Bay port emissions over time. These estimates include the effects of anticipated activity increases as well as emission control regulations in place as of October 2005. They do not include the effects of ARB's recently enacted regulations affecting cargo handling equipment and ocean-going vessel fuels.

It should be noted that the ARB's estimates of emissions related to international goods movement are not necessarily the same as the ports' estimates of port-related emissions. The 2005 emissions inventory updates for each port, due to be completed later this year, will provide information on the actual rate of emissions growth over the period from the 2001/2002 baseline emissions inventories through 2005, and annual updates to the emissions inventories will provide one mechanism for evaluating the effects and effectiveness of the Clean Air Action Plan. Although the ARB international goods movement emission estimates are not precisely the same as the ports' emission estimates, they cover essentially the same emission sources and have

been used as a consistent basis for the comparison of the Clean Air Action Plan with the GMP and the NNI report.

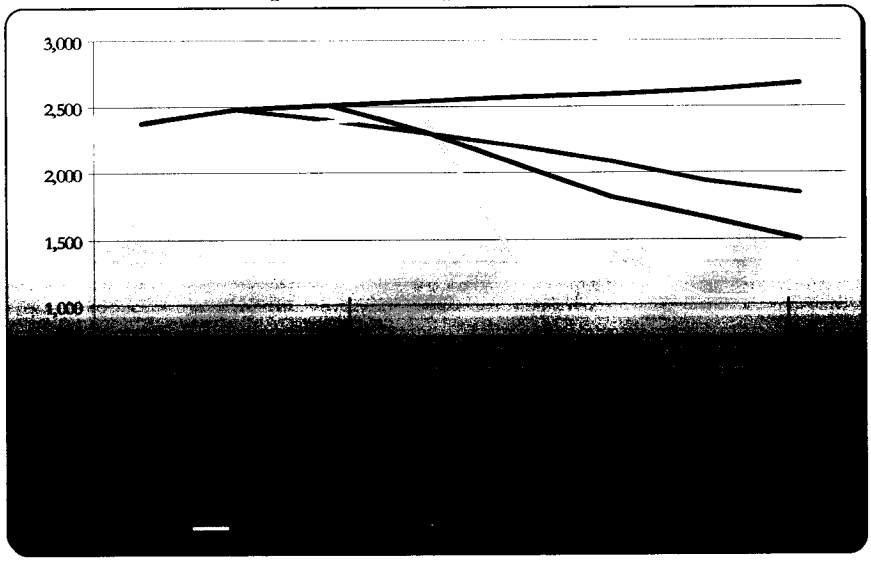
For the comparison, the anticipated effectiveness (percentage reduction) of the three programs was applied to this backdrop of projected growth by multiplying the estimated emissions for each year by the projected control effectiveness of each program. The results of these calculations are shown in the charts on the following pages for DPM and NOx emissions.

Different methods were used in developing the projected control effectiveness of the three emission reduction programs:

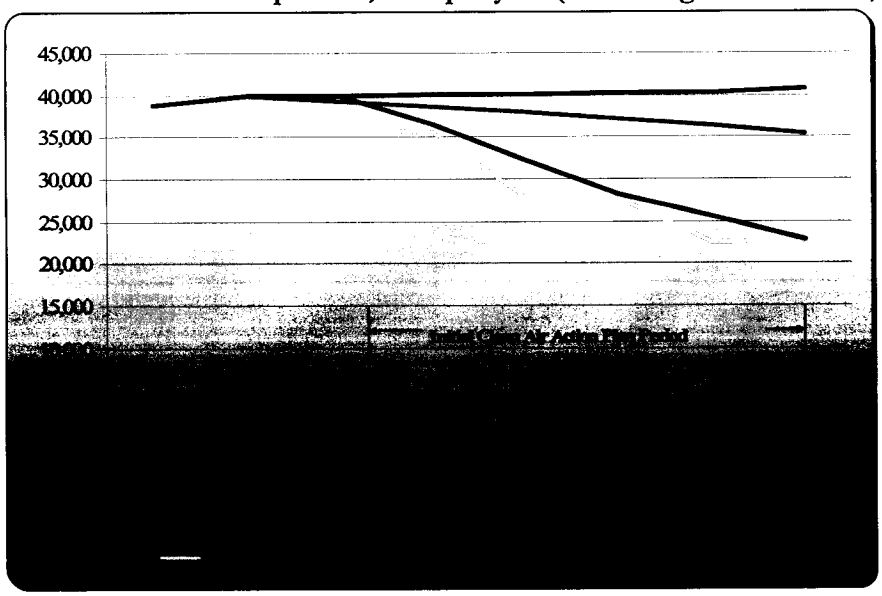
- For the GMP, the effectiveness was determined from ARB's statewide estimates of goods movement-related emissions by comparing their estimates of emissions without the GMP and emissions with the GMP. The difference between the two is the reduction resulting from the GMP. The statewide emission projections were used because ARB has not completed their estimates of SoCAB international emissions after implementation of the GMP, so a comparison could not be made with the SoCAB international goods movement growth estimates discussed above.
- For NNI, the effectiveness was estimated by comparing the estimates of emissions by year before application of NNI measures to the reductions projected for each source category. This is analogous to the method used for the GMP. The percent reductions were applied to the GMP's SoCAB international goods movement emissions growth scenario.
- Control factors and percent reductions for the Clean Air Action Plan were developed for each measure and these were also applied to the GMP's growth scenario.

The following figures evaluate the relative effectiveness of the plans, and illustrate the overall reduction percentages projected for each plan (Clean Air Action Plan, GMP, and NNI report) for DPM and NOx for the period 2004 through 2012, which includes the years covered by this edition of the Clean Air Action Plan. The figures show the estimated emissions by year that are projected to occur under each plan Each line shows the estimated tons of emissions from all source categories.

**DPM Emissions Comparison, tons per year (remaining after controls)**




**NOx Emissions Comparison, tons per year (remaining after controls)**



Except for the projected emissions used to estimate growth without the plans (the red line on the charts), the emission estimates and the reduction percentages shown for the ARB's GMP are based on the statewide projections of emissions, calculated as the difference in emissions with and without the plan, since the directly applicable numbers for the South Coast Air Basin are not yet available. While the local effects of the GMP may be somewhat different than presented in these charts, the general trend can be seen.

The NNI projections of DPM reductions appear to be greater than the Clean Air Action Plan reductions in part due to differing implementation schedules and assumptions. The Clean Air Action Plan emissions reductions are based on a more detailed analysis of available implementation mechanisms. As an example, a large part of the DPM reductions projected by NNI relied on rapid and extensive implementation of the low-sulfur fuels requirements for ocean-going vessels without specifying particular, enforceable methods that would be used to implement the requirements. In contrast, the Clean Air Action Plan's measures relating to low-sulfur marine fuels have been based on a detailed assessment of the timing of lease openings, because lease provisions will provide the most certainty in implementing the requirements. If faster methods of implementation (such as tariffs) are found to be feasible, then the emission reductions projected by the plan will be accelerated and more closely match the NNI line.

Reductions of NOx from the Clean Air Action Plan will be similar to those projected by NNI. A more complete comparison of the effectiveness of the various emission reduction programs is presented in the Technical Report being issued in conjunction with this Overview.

THE PORT OF LONG BEACH

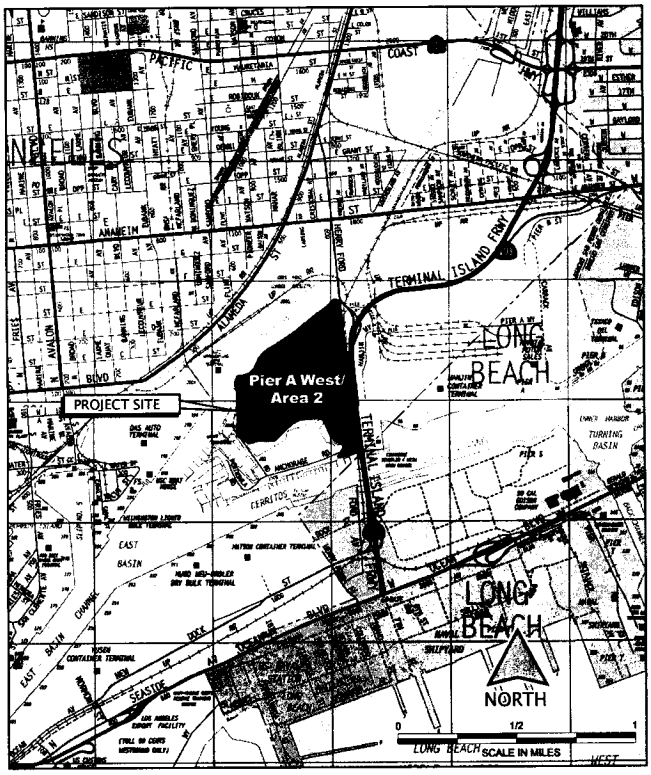
Department of Toxic Substances Control

# FACT SHEET

## Pier A Remediation Project

### Purpose

The Pier A West Remediation Project proposes to clean up contaminated soil and groundwater at a 123-acre oil field owned by the Port. The Port is proposing to clean up the property through stabilization, treatment or removal of contaminated soil and groundwater. In addition, most of the elevation would be raised by about 16 feet and paved with asphalt.




SOURCE: THE THOMAS GUIDE LOS ANGELES/ORANGE COUNTIES, 1998

### Overview

The land, at 421 Henry Ford Ave., is located just outside of the City of Long Beach, in Wilmington, northwest of the Terminal Island Freeway and the Cerritos Channel. The property was purchased by the Long Beach Harbor Department in 1994 from a subsidiary of Union Pacific Railroad. Soil and groundwater at the property had been contaminated by decades of oil production and industrial disposal. The area surrounding Pier A West includes marine terminals, industrial facilities, and other uses such as marinas within the Port of Los Angeles.

### Environmental Protection

The state Department of Toxic Substance Control, which is responsible for the clean up of contaminated sites in California, is the Lead Agency for preparation of the Environmental Impact Report (EIR) and the Port is the Project Sponsor. The Port and DTSC are inviting public participation by hosting a "scoping" meeting to gather public input on the content of the EIR. The EIR will fully evaluate all potential environmental and safety issues, including potential impacts from air toxics and health risks, traffic, hazardous materials, hydrology/water quality and noise.

### Public Participation Process

The DTSC will gather public input on the content of the EIR in a "scoping" meeting scheduled for:

**February 8 at 7 p.m.**
**Banning's Landing Community Center**
**100 E. Water St., Wilmington CA 90744**

Further opportunities for public comment will also be available upon release of the draft EIR. This project does not propose any future uses. In the future, if and when any terminal development is proposed, the Port will conduct a separate environmental review process.

The official Pier A West Remediation Project Notice of Preparation and Initial Study are available on the DTSC web site, http://www.dtsc.ca.gov/SiteCleanup/Projects/Port-of-Long-Beach-Pier-A-West_Area-2.cfm; and also the Port of Long Beach web site, www.polb.com, or at the Port Administration Building, 925 Harbor Plaza, Long Beach, CA 90802.

The review and comment period for the Notice of Preparation will end on February 27, 2006. Comments may be made at the public hearing, or submitted in writing (received no later than February 27) to:

Safouh Sayed
Department of Toxic Substances Control
5796 Corporate Ave.
Cypress, CA 90630

**For more information, please call (714) 484-5478**

Green Port
Long Beach

Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA

# Department of Toxic Substances Control

Maureen F. Gorsen, Director
5796 Corporate Avenue
Cypress, California 90630

Arnold Schwarzenegger
Governor

## NOTICE OF PREPARATION AND PUBLIC SCOPING MEETING

## FOR AN ENVIRONMENTAL IMPACT REPORT

Para información en español por favor comuniquese con Leticia Hernández al número (714) 484-5488.

**DATE:** **January 25, 2006**

**TO:** **Public Agencies and Interested Parties**

**PROJECT:** **PIER A WEST/ AREA 2 REMEDIATION**

**PROJECT LOCATION:** The project site is 123 acres located in Los Angeles County at 421 Henry Ford Avenue, Wilmington, California, 90744. The Consolidated Slip Channel lies to the north and west of the project site, while the Port of Los Angeles Anchorage Road soil stockpile lies to the south and Henry Ford Avenue lies to the east.

**APPLICANT:** City of Long Beach Harbor Department, Port of Long Beach (Port)

**NOTICE OF PREPARATION:** The Department of Toxic Substances Control (DTSC), as Lead Agency under the California Environmental Quality Act (CEQA), is preparing an Environmental Impact Report (EIR) for this project. The purpose of this Notice of Preparation/ Notice of Public Scoping Meeting is to obtain your views as to the scope and content of environmental information and analysis that should be included in the EIR. **As mandated by law, your written comments must be sent to Safouh Sayed at the above letterhead address as soon as possible, but no later than 30-days of receipt of this notice. You may contact Mr. Sayed by email at ssayed@dtsc.ca.gov or by fax at (714) 484-5438.**

**PUBLIC SCOPING MEETING:** DTSC will also conduct a public scoping meeting for the proposed project to receive oral testimony at the time and place listed below:

| | |
|---|---|
| **DATE:** | **Wednesday, February 8, 2006** |
| **TIME:** | **7:00 p.m.** |
| **LOCATION:** | **Banning Landing Community Center**<br>**100 E. Water Street**<br>**Wilmington, California 90744** |

The meeting location is accessible. If you need special accommodations for the meeting or have any questions, contact Tim Chauvel, DTSC Public Participation Specialist, at (714) 484-5487. TDD users can obtain information on this meeting and project by using the California State Relay Service at (888) 877-5378 to reach Tim Chauvel at (714) 484-5487.

## PROJECT BACKGROUND AND DESCRIPTION

The Port has entered into a Voluntary Cleanup Agreement with DTSC in order to remediate groundwater and soil contamination on the project site. Historically, the project site was used for oil production and disposal of materials such as excess soil, building materials (e.g., concrete, bricks, tiles), oil-free rotary mud, oil containing mud, and crude oil tank sludge, as well as oil field materials, consisting of oil, wastewater, and drilling muds.

The proposed project consists of remediation activities for soil and groundwater contamination. The remedial activities would be consistent with the Remedial Action Plan. Soil remediation will consist of excavation and onsite stabilization. Grounwater remediation will consist of one, or a combination of, the following in-situ remediation alternatives: enhanced bioremediation, pump-and-treat, and chemical oxidation. Pump-and-treat remediation has been identified as the preferred alternative. The existing oil field activities will be consolidated into the eastern portion and potentially into a separate southwestern portion of the project site in order to continue oil production. Any contaminated materials that exceed the threshold requirements would be excavated and transported off-site for disposal. The majority of the project site will be elevated by approximately sixteen feet and capped with asphalt paving. No subsequent uses of the project site are proposed; the site will remain as a potential industrial use.

## PURPOSE AND SCOPE OF THE EIR

The purpose of the EIR is to inform the public and governmental decision-makers of the environmental effects associated with implementing the proposed project. This includes analyzing the short-term, construction-related impacts and the long-term operations.

The environmental issue areas listed below may be significantly impacted by the project. In addition, the following environmental issue areas will be discussed in the EIR: Biological Resources, Cultural Resources, Recreation, and Land Use and Planning. For further information, DTSC has prepared an Initial Study, which is available on the DTSC website at www.dtsc.ca.gov .

- **Aesthetics** - impacts may occur from soil import/export, site grading, and elevation of the majority of the site by 16 feet above existing grade, which would permanently change the visual appearance of the site.

- **Air Quality** - health risks to the public from toxic airborne contaminants including exceedance's of criteria pollutants before and during construction activities will occur.
- **Geology and Soils** - soil erosion may occur under the soil cap (approximately 16 feet above existing grade) until the cap is stabilized.
- **Hazards and Hazardous Materials** - remediation activities have the potential to expose persons living on-board in the marinas adjacent to the project site and to on-site workers to contaminants.
- **Hydrology and Water Quality** - the remediation may contaminate the water quality in the vicinity of the site.
- **Noise** - the use of heavy equipment for construction may exceed local noise ordinances, and the transport of soil on roadways may temporarily increase local noise levels.
- **Population and Housing** - construction activities may temporarily displace nearby residents who live aboard boats in the marinas near the project site.
- **Public Services** - remediation activities could require the need for fire protection and police protection personnel for onsite monitoring and offsite traffic control.
- **Transportation and Traffic** - potential impacts to adjacent roadways from the haul truck transport of contaminated soils taken offsite and the import of fill material.
- **Utilities and Service Systems** - a net change in water use by the bioremediation and oil field operations will be evaluated.

In addition to analyzing these environmental issue areas, the EIR will analyze the cumulative impacts and alternatives to the proposed project.

1/23/2006

Safouh Sayed, DTSC Project Manager — Date

1/23/06

Thomas Cota, DTSC Branch Chief — Date
Southern California Cleanup Operations Branch

THE PORT OF LONG BEACH

US Army Corps of Engineers.

# FACT SHEET

## Middle Harbor Redevelopment Project

### Purpose

The Middle Harbor Redevelopment Project proposes to reconfigure and consolidate two irregularly shaped container cargo terminals to create one rectangular-shaped facility that would operate in a more efficient and environmentally friendly manner.

*The Middle Harbor Project proposes to:*

- Rehabilitate aging infrastructure at Piers D, E and F to meet business and consumer trade demands
- Provide deep-water berths and shore-side electricity for next-generation "green" ships
- Accommodate additional on-dock rail operations
- Meet Green Port Policy guidelines

### Overview

The 10-year Project proposes to redevelop existing land and water in two phases:

*Phase 1 construction would:*

- Renovate the existing Pier E container terminal
- Widen and deepen Slip 3
- Fill 22 acres of Slip 1

*Phase 2 improvements would:*

- Connect the Pier E terminal to the Pier F container terminal
- Expand the on-dock rail yard from 10,000 linear feet to 66,000

Construction would generate approximately 680,000 cubic yards of dredge material and approximately 1.2 million cubic yards of excavated material. From the existing 294-acre, the Project would create one consolidated 342-acre container terminal, which would include 48 acres of newly created land.

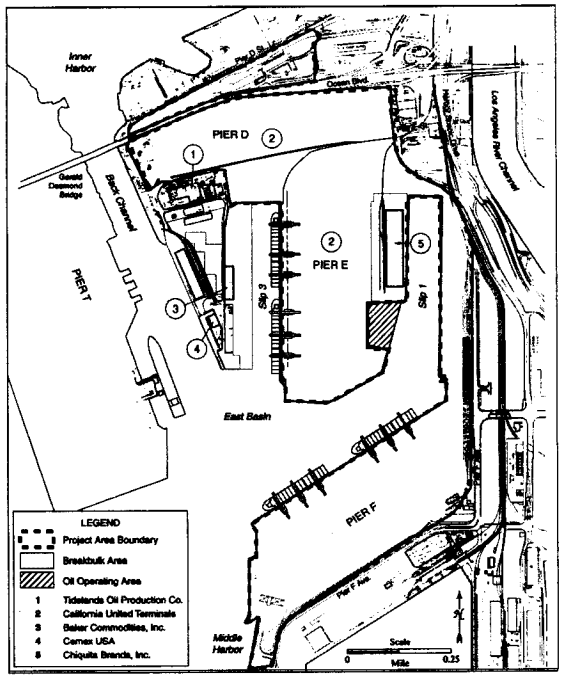



Figure 1. Existing Project Site and Vicinity

### Environmental Protection

In keeping with the Green Port Policy, the Project would minimize or eliminate negative environmental impacts from terminal operations.

To reduce air quality and traffic impacts, the Project would include:

- A new electrical substation and shoreside infrastructure so ships can plug into electricity rather than use their auxiliary diesel engines.
- An expanded on-dock rail yard to shift approximately 32 percent of the cargo shipments from trucks to trains, thus reducing truck trips and associated air emissions.

As a condition for Project approval, clean air technology or alternate fuels would be required of ships, cargo handling equipment, locomotives, and heavy-duty trucks using the facility. "Green building" environmental standards, including drought-resistant landscaping and energy-efficient lighting, would be applied to construction and design.

### Background

The proposed Middle Harbor Project was the subject of a 2001 Environmental Impact Report (EIR). However, as part of the Green Port Policy adopted in 2005, the Board of Harbor Commissioners directed staff to develop new environmental analysis protocols and apply them to all Port project documents, including the Middle Harbor Project.

The U.S. Army Corps of Engineers (Corps or USACE) is the federal lead agency for National Environmental Policy Act (NEPA) compliance and the required Environmental Impact Statement (EIS) for the proposed Project; and the Port is the state lead agency for California Environmental Quality Act (CEQA) compliance and the EIR for the project.

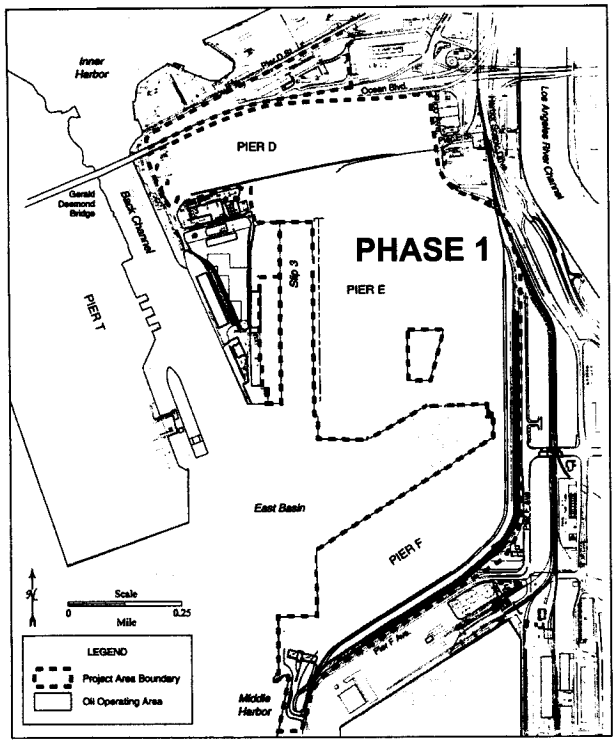
### Review Process

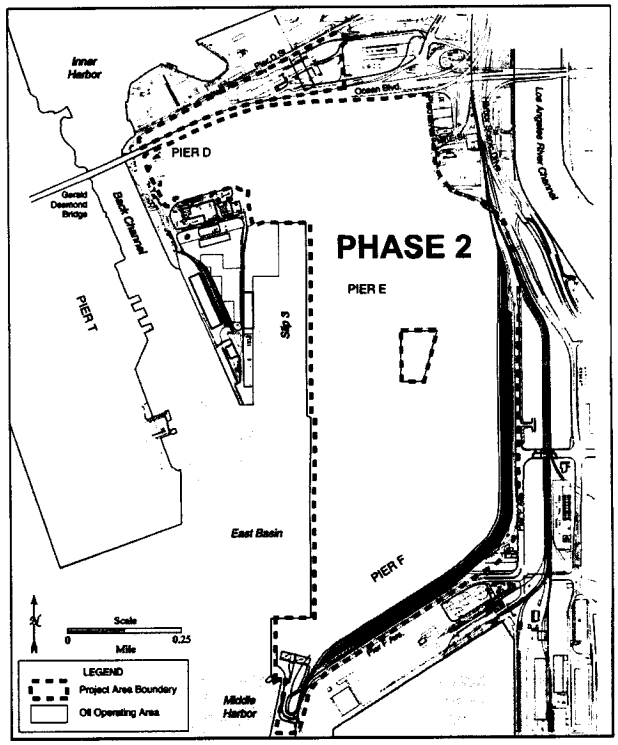
Before the Port-governing Long Beach Board of Harbor Commissioners and other public entities can make a decision on whether or not to approve the Project, extensive environmental review and public participation is required:

- During the "scoping" phase, the public and regulatory and resource agencies are invited to submit comments at public meetings or in writing on topics for discussion in the draft EIR/EIS.
- A draft EIR/EIS will be circulated for further comment at public meetings and in writing.
- A final EIR/EIS will be circulated prior to public hearings and a decision by the Board of Harbor Commissioners

*Phases 1 and 2 maps on reverse*

Green Port Long Beach




## How You Can Participate

The Army Corps has issued a Notice of Intent and the Port has issued a Notice of Preparation for the Project. The Notice of Preparation is available for review at:

- City of Long Beach Main Library, 101 Pacific Avenue, Long Beach
- Port of Long Beach, Planning Division, 925 Harbor Plaza, Long Beach
- The Environment section of the Port of Long Beach website (www.polb.com)

*The two agencies will hold a joint public scoping meeting:*

**January 30, 2006, at 7 p.m. at the Long Beach City Council Chambers, 333 W. Ocean Blvd, Long Beach**

*The Port will hold a second public meeting:*

**February 6, 2006 at 7 p.m. at Cabrillo High School (Auditorium), 2001 Santa Fe Ave., Long Beach**

Participation at these public scoping meetings is encouraged.

The review and comment period for the Notice of Intent and Notice of Preparation will end on February 13, 2006. Comments must be received no later than 4:00 p.m. on February 13. Comments may be made at the public hearings, or submitted in writing, faxed, or e-mailed to:

Robert Kanter, Ph.D.
Director of Planning &
Environmental Affairs
Port of Long Beach
925 Harbor Plaza, P.O. Box 570,
Long Beach, California 90802
Fax No: (562) 901-1728
E-mail: kanter@polb.com

**For more information, please call (562) 590-4160**

THE PORT OF LONG BEACH

US Army Corps of Engineers.

**December 15, 2005**

# NOTICE OF PREPARATION AND INITIAL STUDY FOR THE PORT OF LONG BEACH MIDDLE HARBOR REDEVELOPMENT PROJECT

## 1.0 INTRODUCTION

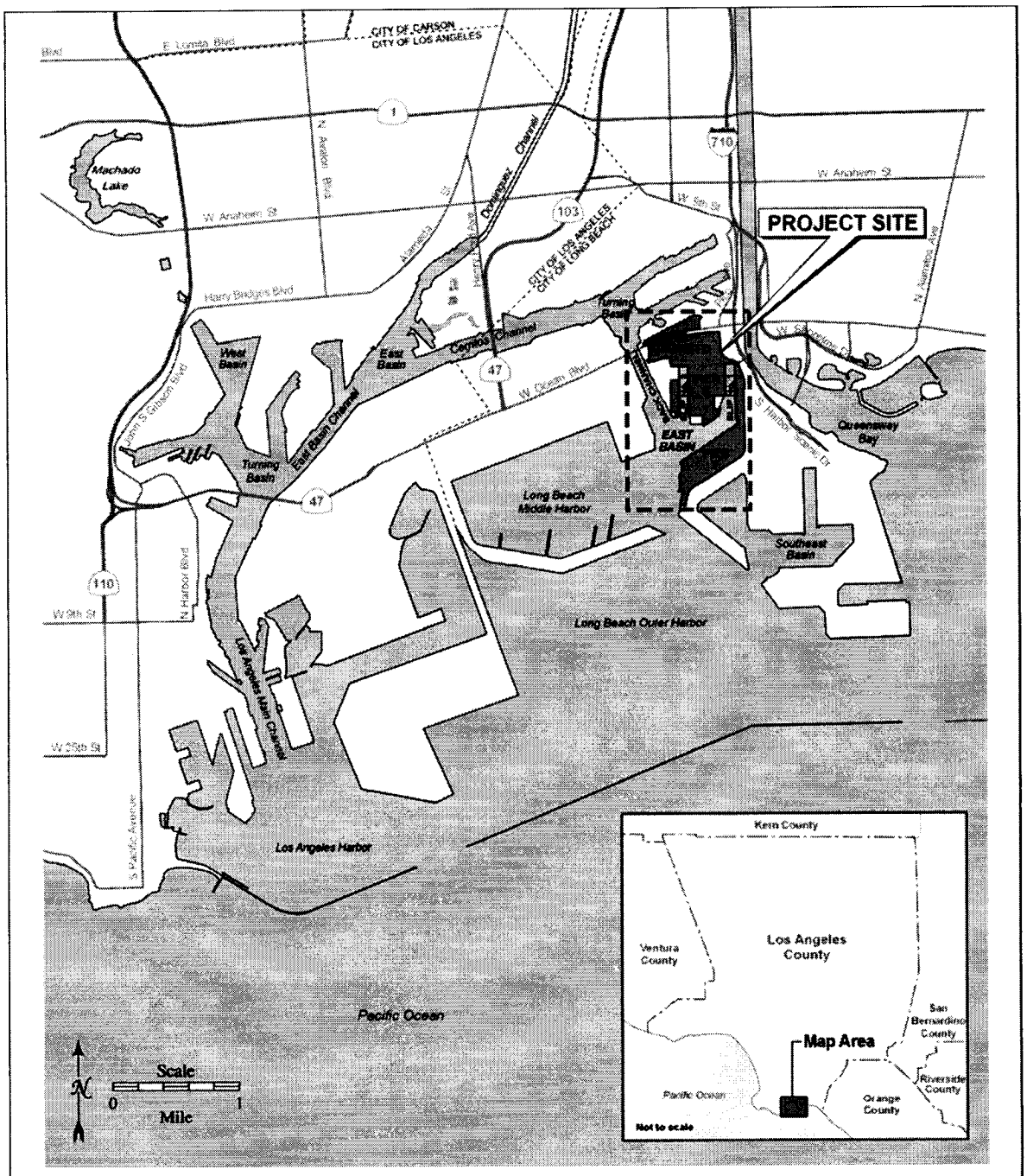
The Middle Harbor of the Port of Long Beach (Port or POLB) comprises Piers D, E and F. Redevelopment of the Middle Harbor was the subject of the 2001 Environmental Impact Report (EIR) for the Piers D/E/F Terminal Redevelopment Project and the 2004 Notice of Preparation for related in-water and wharf construction activities. In early 2005, the Port adopted the Green Port Policy designed to reduce the impacts of port development and operations. As part of the Green Port Policy, the Port reviewed and strengthened its environmental review and documentation processes. Since the Port had only commenced relatively minor land-side improvements in the Middle Harbor, the Port has decided to conduct a new environmental analysis of the entire Middle Harbor Redevelopment Project (hereinafter "proposed Project" or "proposed Pier E") to ensure that all environmental impacts and alternatives are thoroughly disclosed and analyzed, and that all feasible mitigation measures are included.

The U.S. Army Corps of Engineers (Corps or USACE) is the federal lead agency for National Environmental Policy Act (NEPA) compliance and Environmental Impact Statement (EIS) for the proposed Project, and the Port is the state lead agency for California Environmental Quality Act (CEQA) compliance and the EIR for the Project.

Figure 1 depicts the regional location and the proposed Project vicinity. Figure 2 depicts existing conditions at the proposed Project site.

## 2.0 BACKGROUND

International market demands continue to increase the volume of containerized cargo transported through U.S. West Coast ports. The Ports of Los Angeles and Long Beach and the USACE conducted a major study between 1981 and 1985 to evaluate the capacity of the combined port complex in San Pedro to accommodate cargo forecasts through the year 2020 (LAHD et al. 1990). This "2020 Plan" determined that larger vessels would require reconfigured terminals and deeper channels and the projected increase in cargo throughput would require port expansion and equipment modernization. The Port has initiated several projects to deepen and improve navigation channels, optimize and expand existing facilities, construct new landfills and container terminal facilities, and improve onshore transportation networks. These projects include constructing a 375-acre Pier T container terminal on Terminal Island; constructing a 160-acre Pier S terminal on a former Terminal Island oil field; building a deepwater, liquid bulk terminal on Pier T to serve larger tankers; and replacing the five-lane Gerald Desmond Bridge with a taller bridge with at least six lanes. The Port's highest planning priority is to preserve the economic benefits of trade while reducing the impact of port development and operations.




*Source:* PCR Services Corporation, 2004

**Figure 1. Proposed Project Regional Location and Vicinity**

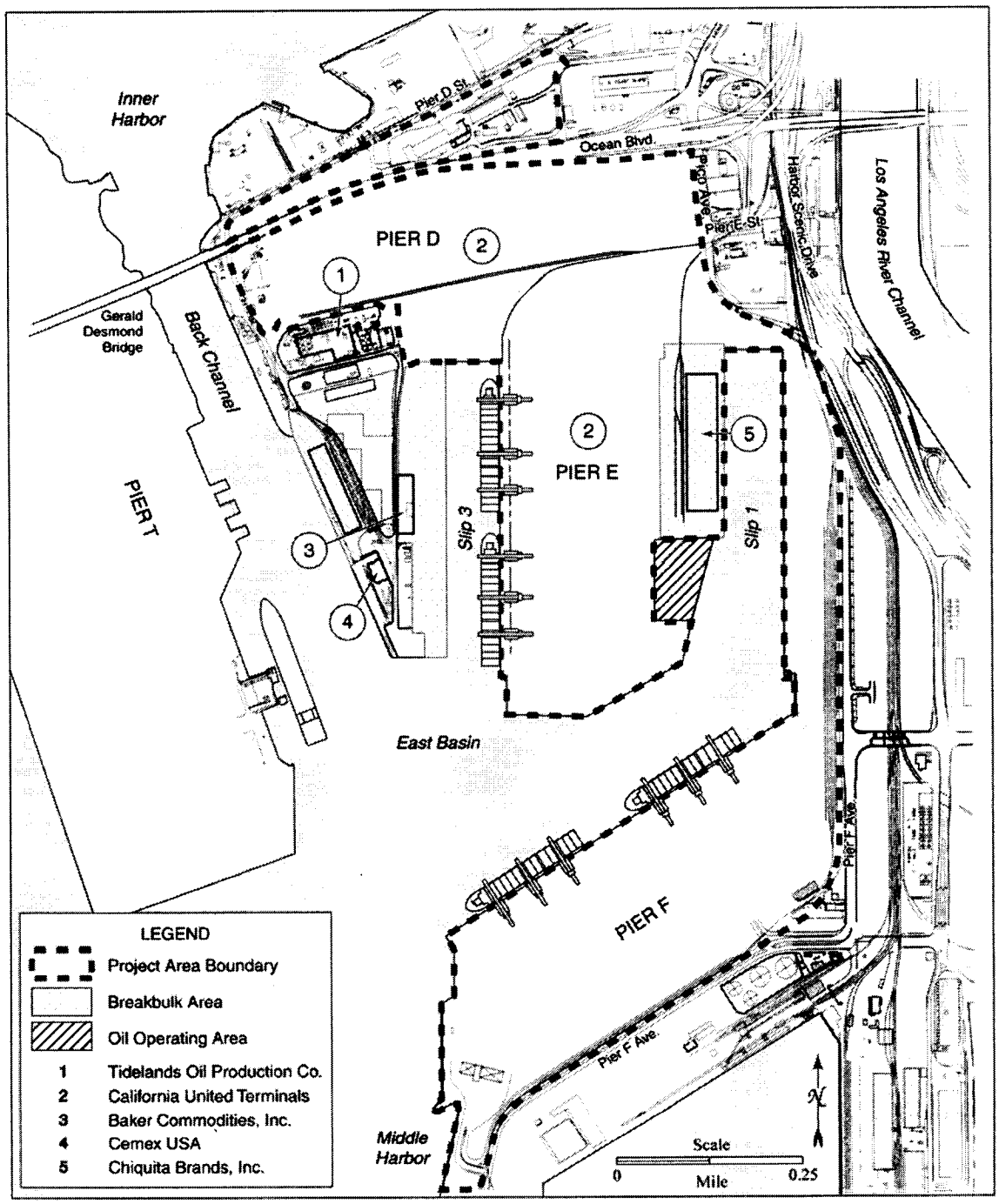



**Figure 2. Project Site Map**

## Project Purpose and Need/Objectives

NEPA requires an EIS to discuss the "Purpose and Need" for a proposed federal action. Similarly, CEQA requires an EIR to discuss the "Objectives" of a proposed project. These respective discussions are essential to explaining the underlying reasons why the Port is proposing the project and why this particular solution is being recommended. Additionally, the Purpose and Need/Objectives are instrumental in determining which alternatives should be included in the document.

### *Project Purpose and Need*

The purpose of the proposed Project is to rehabilitate old infrastructure and provide adequate water and landside marine terminal facilities needed to accommodate a portion of the predicted future containerized cargo throughput volume and the modern cargo vessels that transport these goods to and from the Port. Surface waters (Slips 1 and 3, and the East Basin) and berths within the Project site are too shallow and inadequately configured to accommodate modern, large, deep-draft cargo ships, and the existing terminals are insufficient for the activities and modern equipment necessary for efficient and safe handling of the anticipated containerized cargo volumes. Therefore, the proposed Project is necessary to meet the increasing import and export volume needs and to accommodate the changing requirements associated with modern containerized cargo vessels for primary port facilities located within the Middle Harbor Planning District.

### *Project Objectives*

The proposed Project includes strategic redevelopment, expansion, and modernization of existing waterfront property and Port lands to accommodate the forecasted increases in containerized cargo throughput volumes. The objectives of the Middle Harbor Redevelopment Project are to:

- Consolidate common operations and wharves and expand marine backland terminal facilities on existing, under-utilized wharf and waterfront areas;
- Rehabilitate and modernize existing primary Port facilities (e.g. implement the Green Port Policy including shore-to-ship power ("cold ironing"));
- Provide for efficient terminal traffic flow and cargo handling operations;
- Link new and improved dock and wharf operations to planned and existing intermodal rail yard facilities;
- Replace obsolete and deteriorated wharf structures with adequate, well-equipped wharf areas along with channels and berths with sufficient width, length, and depth to allow existing and future cargo vessels access to the docks;
- Fill unused slips and adjoining areas not accessible to the broadest range of current and future containerized cargo vessel types; and
- Incorporate design and operational measures that protect the environment during construction and subsequent operation of the proposed Project.

# 3.0 PROJECT DESCRIPTION

The proposed Project would rehabilitate old infrastructure and provide adequate water and landside marine terminal facilities to accommodate a portion of the predicted future increases in containerized cargo throughput volume and the modern, larger cargo vessels that are expected to transport these goods to and from the Port. The proposed Project includes terminal expansion on adjacent areas of existing and newly created land, dredge and fill operations, and new wharf construction. The existing

294-acre Project site would be increased to 342-acres, including 48 net acres of newly created land. (The net acreage estimate takes into account the proposed fill areas and new wharf construction, and the demolition of existing wharf areas that would not be replaced. Refer to section 4.0, Project Phasing, below.) Specific elements of the proposed Project are described in the paragraphs below.

## Demolition

Demolition of existing structures would be required to accommodate proposed site improvements. In general, existing container yard infrastructure to be removed would include fences, guard posts, buildings/structures, reefer systems, rail road tracks, light posts, oil wells and piping, and asphalt pavement. Wharf materials that would be removed or demolished include concrete deck and beams (capping and transverse), piles (timber, concrete, and steel pipe), fender systems, bollards, gangways, floating docks, and steel sheet pile walls (Moffatt & Nichol 2005). Site improvements necessary for terminal expansion would also require demolition of underground utility mains and lines (including storm drains, sewer, water, electrical/telephone, and gas) within the proposed Project area. Demolition and construction of new utility mains and lines would be conducted in a manner designed to ensure that services remain uninterrupted to the adjacent tenants.

Non-recyclable material accumulated during the demolition activities would be transported to a designated disposal site. Recyclable waste materials would be processed for reuse by the proposed Project to the extent feasible. Demolition activities would be phased to avoid interfering with adjacent Port operations. Structural removal activities would be conducted in a manner designed to avoid damage to surrounding structures, pavement, utilities, equipment, and property. Salvaged structures would be removed, stored, and reinstalled by the contractor, as feasible (Moffatt & Nichol 2005).

## Dredge and Fill Operations

Dredging and excavation would be required for a variety of construction activities including: (1) deepen Slip 3 to a minimum of -55 feet MLLW; (2) widen Slip 3 by 110 feet to accommodate four deep-water berths; (3) fill in the 22-acre Slip 1 and approximately 33 acres of the East Basin between existing Piers E and F for additional container terminal area; and (4) fill the existing Tidelands submerged oil area located at the southeast end of existing Pier E with suitable materials dredged and excavated from Slip 3 and excavated from Berth F201 (see Figure 3). The net result of these construction activities would be to create approximately 48 acres of new land which when added to the existing project site would total 342 acres of land.

The proposed Project would generate approximately 680,000 cubic yards (cy) of dredged material; it also would generate approximately 1,290,000 cy of excavated material. All dredge and excavated materials generated by the proposed Project would be reused as fill for the proposed extension area of Pier E, submerged Tidelands oil area (both located at the southeast end of existing Pier E), and Slip 1 fill area. Remaining surcharge material would be removed and transported to another location within the Port; the location will be identified in the EIS/EIR for the proposed Project. The USACE has jurisdictional authority over the discharge of dredged materials and placement of fill in Waters of the U.S. Permits for dredging and filling activities would be coordinated with and obtained from the USACE, Regional Water Quality Control Board (RWQCB), and the U.S. Environmental Protection Agency (EPA).

Approximately 6,730,000 cy of imported fill material from sources inside and outside the Harbor District would also be required. Potential sources of fill material from inside the Harbor District include the West Basin Sediment Remediation Project, the Western Anchorage Sediment Storage Site, and the Back Channel Phase II Deepening/Pier S Project. Additional sources of fill, if needed, would

be imported from as yet undetermined dredge and upland borrow locations throughout the southern California region.

### Wharf Construction

A new wharf would be constructed to handle increased cargo throughput and accommodate deep-draft container ships, and to replace existing insufficient wharves. The new wharf would consist of four deep water berths with -55 feet MLLW depth. Twenty-four-inch diameter pre-cast octagonal concrete piles would be installed at 6- to 18-foot intervals over a distance of approximately 4,250 feet to support the new concrete wharf. Electrical power service lines from the proposed on-site 66 kV substation would be installed with connections to berths (i.e., shore-to-ship service), buildings, and other wharf structures (i.e., lighting, etc.).

### Container Yard Improvements

The following buildings and ancillary infrastructure would be constructed to support future containerized cargo operations at the expanded proposed Pier E terminal: marine operations building and longshore restroom facilities; maintenance and repair facility; administration building; rail yard; and other miscellaneous terminal improvements such as new asphalt paving, striping, lighting, and utilities. In addition, safety and security features of the proposed Project would include, but would not necessarily be limited to:

- *Radiation Portal Monitor (RPM)*—The Project site will incorporate RPM equipment at the exit gate area for the initial automated inspection of the contents of containers prior to exiting the marine terminal.
- *Customs Radiation Inspection Facility*—A secondary RPM facility inside the marine terminal will be installed and used for detailed inspection of container contents where radiation was detected in the initial RPM inspection. U.S. Customs Border Patrol would operate this facility and provide the inspection service.
- *Project Site Fencing*—Existing fencing will be modified to provide adequate security for the marine terminal as required by U.S. Customs Border Patrol.

## 4.0 PROJECT PHASING

### Construction – Phase 1

Phase 1 construction would redevelop the existing Pier E container terminal area and consist of the components described below (see Figure 4a). It is anticipated that Phase 1 construction activities would begin in 2007 and continue until 2016. Details of the primary Phase 1 activities are as follows:

- *Widen Slip 3* – Existing wharf structures and backland areas on Pier D and E would be demolished and/or relocated to facilitate Slip 3 improvements. Materials would be dredged from Slip 3 and excavated from existing Pier D and E berths to widen Slip 3 by 110 feet and deepen the waters to a minimum depth of -55 feet MLLW. Slip 3 improvements would require removal and/or relocation of existing facilities (i.e., Baker Commodities, Inc. facilities on Pier D would be removed and the Tidelands oil well facilities and pipelines located on the southwest portion of Pier E would be relocated). Construction associated with these removal and relocation activities will be fully described in the EIS/EIR.

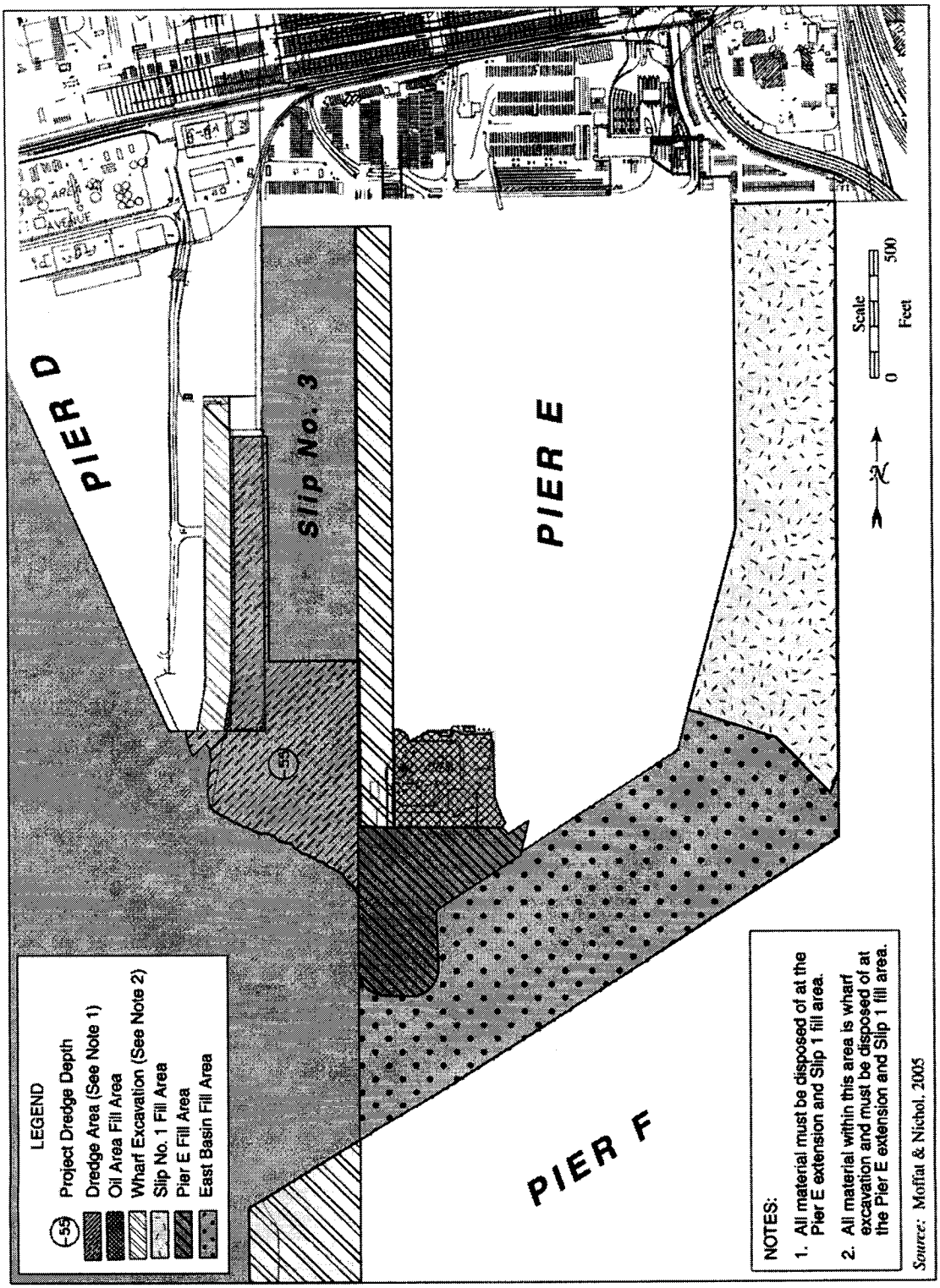



**Figure 3. Dredge Plan**

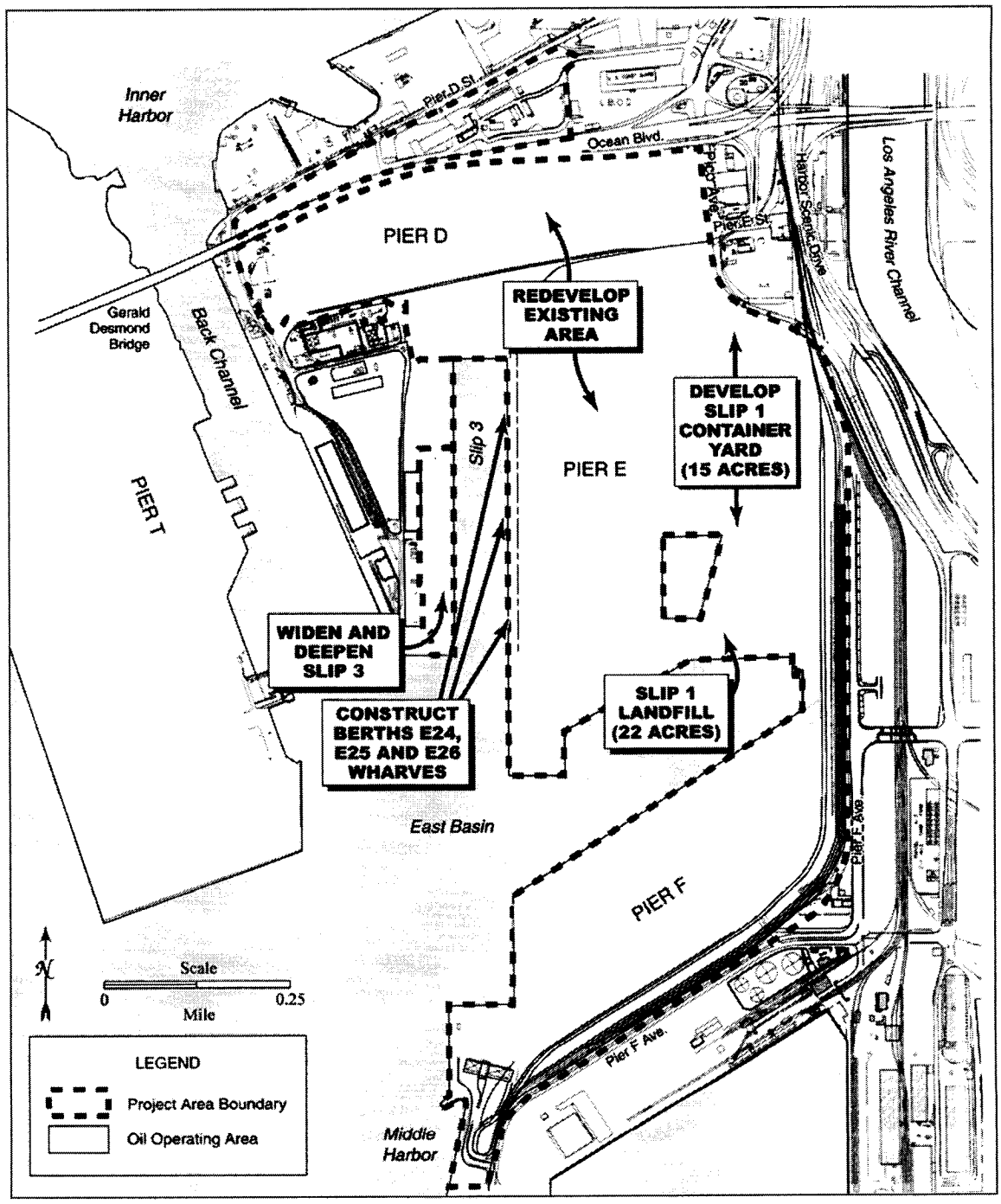



**Figure 4a. Project Phase 1 Development**

- *Fill 22 Acres of Slip 1* – Approximately 22 acres of Slip 1 would be filled with structurally suitable materials dredged and excavated from Slip 3 and from additional sources inside and outside the Harbor District; the location of the additional source material will be identified in the EIS/EIR.

- *Redevelop and Construct New Extension at Berth E24 Wharf* – Submerged lands on Pier E (including the Tideland oil area) would be filled with structurally suitable materials dredged and excavated from Slip 3 and Pier D to accommodate construction of a new wharf extension at Berth E24.

- *Redevelop and Construct New Extension at Berth E24 Wharf (cont'd)* – Approximately 400 feet of existing Berth E24 would be removed and a new extended wharf (1,100 feet) would be constructed over the existing area (including the Tidelands oil area). The new extended wharf at Berth E24 would include provisions for shore-to-ship power ("cold-ironing") for ships at berth. The Port will construct a new 66-kilovolt (kV) electrical substation, in coordination with Southern California Edison, and related terminal electrical distribution systems to supply shore-to-ship power. The substation would be located either within the Port on the marine terminal site or just off-site near the South Pico Avenue/West Pier E Street intersection.

- *Redevelop Berth E25 and Berth E26 Wharves* – A new wharf at Berth E25 and Berth E26 would be constructed with possible soil stabilization improvements due to liquefiable soils at the Project site. The combined new wharf for Berths E24, E25, and E26 will be 2,900 lineal feet. A new marine operations building and longshore restroom facilities would also be constructed as part of the development. Sediment would be dredged and excavated from Slip 3 and the existing slopes beneath the new Berth E25 and Berth E26 would be modified and reinforced with quarry run rock and armor stone.

- *Complete Berth E27 Wharf Improvements* – The existing Berth E27 wharf structure would be improved and upgraded to current wharf design standards.

- *Develop Slip 1 Container Terminal Land* – Approximately 15 acres of Slip 1 would be developed into additional backland area for container storage. This area would be graded, paved, and improved with striping, lighting, fencing, utilities, buildings, and other typical backland elements.

- *Container Yard Redevelopment* – The existing Seaside Rail Yard would be demolished and approximately 32 acres of the site and adjacent terminal area would be redeveloped as a container storage yard/backland area. A new maintenance and repair facility would also be constructed. In addition, approximately 18 acres of additional backland area would be developed for container storage through the redevelopment of underutilized land within the northwestern portion of Pier E located north of the Gerald Desmond Bridge and Ocean Boulevard. After the land is cleared, the areas would be graded, paved, and improved with striping, lighting, fencing, utilities, buildings, parking, and other typical backland elements. This development stage includes minor improvements to Pier D Street and potential relocation of on-street parking to adjacent Port land as needed to improve circulation.

## Construction – Phase 2

Proposed Phase 2 improvements would connect the existing Pier E terminal to the existing Pier F container terminal, expand backlands for container terminal use, and demolish the existing Pier F wharf and extend the wharf constructed in Phase 1 to 4,250 lineal feet to handle expected increases in cargo throughput and numbers of deep-draft container ships (see Figure 4b). It is anticipated that Phase 2 construction activities would begin in 2011 and continue until 2017 and would include the following:

- *Complete Slip 1 Container Terminal Development* – Demolish existing Pier F wharf structures, and fill and develop the remaining 7 acres of backland for container yard activities.

- *Create East Basin Landfill* – Approximately 33 acres of the East Basin area between Piers E and F would be filled with structurally suitable materials dredged and excavated from sources inside and outside the Harbor District; the location of the additional source material will be identified in the EIS/EIR. The existing wharves at Berths F8-F10 would be demolished

- *Expand Existing Intermodal Rail Yard* – The existing Pier F rail yard track system would be expanded from 10,000 track feet to approximately 66,000 track feet.

- *Construct New Berth E23 Wharf* – The new concrete, pile-supported wharf (Berth E23) would be constructed to extend the Pier E wharf 1,350 lineal feet for a total wharf length of 4,250 lineal feet.

- *Existing Pier F Redevelopment* – The Pier F container yard area would be cleared, graded, paved, and improved with striping, lighting, fencing, utilities, buildings, and other typical backland elements, including a new Administration Building and ancillary facilities.

## Operations

When completed, the proposed Project would consists of one consolidated container terminal (proposed Pier E) which would be designed to load and offload containerized cargo from marine vessels. The terminal operations would include use of wharves/berths, gantry cranes, yard tractors (hostlers), container terminal backland areas (storage yards), entrance and exit gates, and maintenance and administrative buildings. Electric gantry cranes would be used to load and unload cargo containers between vessels and the terminal. Yard tractors (hostlers) would transport the cargo containers to and from the container storage areas within the terminal and/or to and from railcars at the on-dock intermodal rail yard. Offloaded (imported) containers would either be stored temporarily in the container terminal storage yards or immediately shipped outside the terminal to outlying distribution facilities via truck or rail. Loaded (export) cargo would be imported to the proposed Pier E container terminal by truck or rail; export cargo shipped via rail would either arrive directly at the proposed Pier E on-dock intermodal rail yard or would arrive at another local rail yard and then be trucked to the terminal gate for receiving. Safety and security features of the proposed Project include, but are not necessarily limited to:

- *Radiation Portal Monitor (RPM)*—The Project site would incorporate RPM equipment at the exit gate area for the initial automated inspection of the contents of containers prior to exiting the marine terminal.

- *Customs Radiation Inspection Facility*—A secondary RPM facility inside the marine terminal would be installed and used for detailed inspection of container contents where radiation was detected in the initial RPM inspection. U.S. Customs Border Patrol would operate this facility and provide the inspection service.

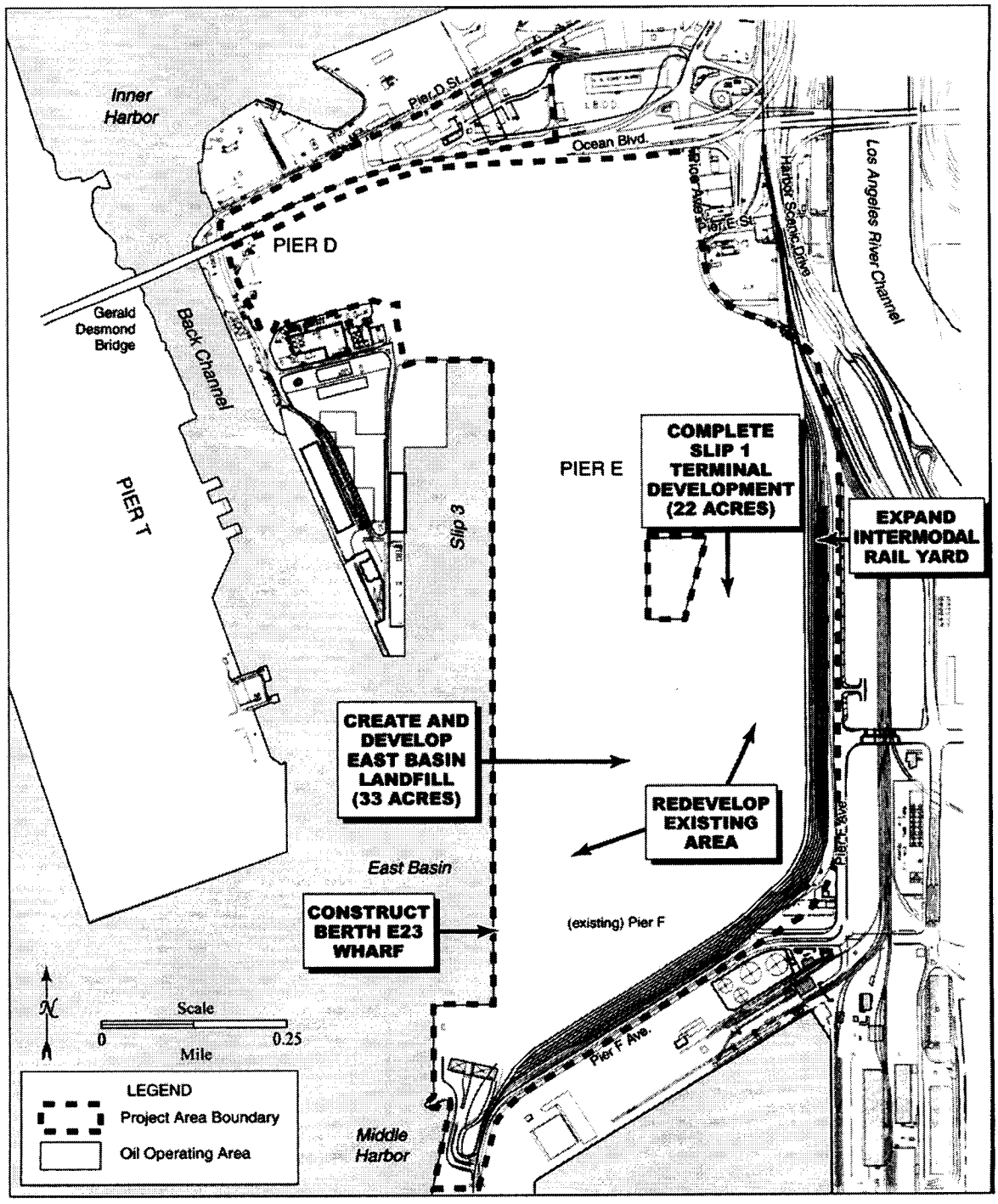



**Figure 4b. Project Phase 2 Development (Proposed Project Layout)**

- *Project Site Fencing*—Existing fencing would be modified to provide adequate security for the marine terminal as required by U.S. Customs Border Patrol.

***Terminal Operations***

After the proposed Project is constructed, the Pier E container terminal is expected to operate 21 hours per day, 365 days per year. The terminal could handle approximately 2,822,000 TEUs (Twenty-foot Equivalent Units[1]) (1,525,000 containers) per year at Project buildout in year 2020 (see Table 1). When optimized at maximum throughput capacity (anticipated in year 2023), the Pier E consolidated container terminal would be designed to accommodate approximately 3,310,000 TEUs (1,789,000 containers) per year.

**Table 1.** Middle Harbor Redevelopment Project: Statistical Summary (1)

| Marine Terminal Component (Estimates) | Baseline 2005 | Proposed Project 2020 | Proposed Project 2023(3) |
|---|---|---|---|
| Project Site Acreage | 294 | 342 | 342 |
| TEUs(2) per Acre | 5,180 | 8,820 | 10,344 |
| TOTAL TEUs | 1,264,000 | 2,822,000 | 3,310,000 |
| Annual Vessel Calls | 185 | 312 | 364 |
| Average Daily Truck Trips | 4,650 | 7,650 | 8,950 |
| Weekly Trains(4) | <1 | 10 | 10 |

(1) All estimates are preliminary and subject to refinement.
(2) TEUs = Twenty-foot Equivalent Units. The TEU-per-acre estimates are based on the approximate size of the container yard projected for each year noted (2005, 2020, and 2030). In each instance, the container yard is assumed to be slightly smaller than the Project Site Acreage due to other uses on the Project site (e.g., break bulk cargo).
(3) Estimated year that Project would reach maximum throughput capacity.
(4) Estimate assumes 25 rail cars per train.
(5) LBCT does not generate one intermodal train per day on a regular basis; non-intermodal real cars are move to/from other POLB and Port of Los Angeles terminals.

***Vessel Operations***

The proposed Project—Pier E marine terminal—operations would result in a maximum of 364 vessel calls per year (see Table 1). All vessel offloading/loading activities associated with the Project would

[1] Container capacity (of ships, ports, etc) is measured in twenty-foot equivalent units (TEU). A twenty-foot equivalent unit is a measure of containerized cargo equal to one standard 20 foot (length) × 8 foot (width) × 8.5 foot (height) container. Therefore, a single 20 foot container equals one TEU and a single 40 foot container equals two TEU. There are five common standard container lengths used in the shipping industry, however, U.S. domestic standard containers are generally 48 ft and 53 ft (approximately 2 TEU each).

occur at proposed Berths E24-E27. Based on the schedules used to estimate future berth activity/capacity, it is anticipated that a maximum of three (3) vessels would be berthed at one time.

***Truck Operations***

Preliminary estimates indicate the total truck trips to and from the Pier E container terminal would increase from an average of 4,650 trips per day to an average of approximately 8,850 trips per day (i.e., a 92% increase) as a result of increased import and export of containerized cargo under the proposed Project operations. When operating at maximum throughput capacity in 2023, approximately 68 percent of the containers (about 2,151,500 TEUs) would be moved to and from the terminal via truck. Of that 68 percent, about 8 percent of the truck movements would represent the transport of containers via truck to and from off-dock rail yards. The remainder (approximately 32 percent) would be loaded onto railcars in the on-dock rail yard and transported by train. Those containers hauled via truck (except those to and from the off-dock rail yards) would be transported to and from warehouses, distribution centers, and container freight stations in the Los Angeles Basin and southern California region.

***Rail Operations***

The expanded intermodal rail yard at Pier E would only handle cargo from the proposed Project. The rail yard would be operated 21 hours per day, 365 days per year. When the proposed Project terminal is fully optimized at capacity in 2023, preliminary estimates indicate the on-dock intermodal rail yard would transport approximately 1,158,000 TEU which represents approximately 32 percent of the terminals maximum expected throughput.

## 5.0 ENVIRONMENTAL CONTROLS INCLUDED IN THE PROPOSED PROJECT

### Clean Air Technology

- *Shore-to-Ship Power ("Cold Ironing")*—A new 66/12 kilovolt (kV) substation (Pier E Substation) would be constructed on the proposed Project site by the Port in cooperation with SCE to supply shore-side power for shore-to-ship power during periods when vessels are at berth. The new substation would be located on an approximately 0.25 acre site. Vessels servicing the proposed terminal would be required to cold-iron or use alternative fuels or other clear air technology to reduce emissions while at the Port terminal.
- *Electrification of Dredge Equipment*—An existing nearby Port substation would be used to provide power to electric dredges during construction phase dredge activities at the Project site.
- *Construction Equipment*—Construction contractors would be required to use emulsified diesel fuel, install diesel oxidation catalysts in construction equipment, and/or use construction equipment meeting EPA Tier 3 specifications.
- *Container Handling Equipment*—Container terminal operators would be required to use container handling equipment (CHE) that complies with EPA Tier 4 requirements and/or uses cleaner fuels, such as liquefied natural gas (LNG) fueled hostlers (hostlers are tractors for moving containers within a container yard). The necessary electrical facilities would be provided to support the use of electric-powered CHE, should such equipment prove feasible in the future.
- *Locomotives*—Under the Pacific Harbor Line agreement with the POLB, only hybrid-technology switching engines (e.g., "Green Goat" engines) or locomotives that meet a minimum Tier 2 standard would be used for switching in the terminal.

- *Heavy-Duty Trucks*—The Port will work with local regulatory agencies to implement use of low-sulfur fuel, diesel particulate filters, and diesel oxidation catalysts within the Harbor District in accordance with EPA and the California Air Resources Board requirements.
- *Terminal Gate*—The truck in/out gates would be equipped with technology options to maximize operational efficiency, such as an optical character recognition system (OCR) which identifies container, chassis and truck license plate numbers as the truck passes through the gate.

## Water Resources Protection

- *Construction Storm Water Pollution Prevention*—This project would conform to the requirements of the General Storm Water Permit for Construction Activities. A Storm Water Pollution Prevention Plan (SWPPP) would be prepared in conformance with the Permit and include site inspections, employee training, and Best Management Practices (BMPs). BMPs would include but not be limited to the following features:
  - Erosion Control;
  - Inlet Protection;
  - Waste and Material Management
  - Equipment Management and Fuelling
- *Dredge Monitoring*—Dredge operations will be conducted in accordance with a USACE Permit and Los Angeles Regional Water Quality Control Board Waste Discharge Requirements (WDR) and Monitoring Program. Water Quality data will be collected during dredge operations to ensure conformance with the WDR.
- *Wharf Face Drainage*—The wharf deck drainage would be directed landward to a trench drain and water collection area where it will undergo treatment by one or more of the following: settlement, filtration, clarification, and/or oil/water separation.
- *Operational SWPPP*—The proposed Project would be included in the Port-wide Master Storm Water Program. Under the Program, the proposed Project would develop a SWPPP that would include employee training, inspections, annual certifications, and BMPs. Best Management Practices for operational activities would include, but not necessarily be limited to, the following features:
  - Storm Water Treatment
  - Erosion Control
  - Spill Prevention
  - Waste Collection Practices

## Sustainable Development

- *LEED® Standards*—Marine terminal buildings would be designed and constructed to LEED® (Leadership in Energy and Environmental Design) standards for high-performance, sustainable buildings.
- *Reuse and Recycled Materials*—The proposed Project would reuse suitable dredge and excavated materials from the Project site and other sites within the Harbor District as fill material. Waste materials from demolition of existing project site improvements—such as

asphalt concrete, steel, copper, and other materials—would be salvaged and reused on-site or hauled to an off-site construction waste recycling facility.

- *Xeriscape Landscaping*—Water conservation features including drought-tolerant planting materials would be incorporated into the project landscaping, consistent with the *Master Landscape Plan for the Port of Long Beach* (POLB 1994).
- *Lighting Control*—The proposed Project would incorporate use of photo cells/timers, low energy fixtures, and light-spillover reduction features.

## 6.0 PROJECT ALTERNATIVES

Both CEQA and NEPA require an EIR/EIS to evaluate a reasonable range of alternatives to achieve the project's objectives (e.g., Purposes and Need). The Port has already identified a variety of possible alternatives to be included, and is interested in receiving suggestions for additional alternatives in response to this NOP.

Once the comments on the NOP are received, the Port will undertake a screening process to determine which alternatives will be evaluated in detail in the EIR/EIS, and which will be eliminated from such consideration. In screening the alternatives, the Port will consider three broad factors:

- Would the alternative achieve the Purpose and Need/Objectives?
- Would the alternative avoid or reduce any significant environmental effects?
- Is the alternative ostensibly feasible?

The EIR and EIS will contain a detailed explanation of this screening process and the reasons why some alternatives are included and others eliminated. Alternatives to the proposed Project will be investigated during the environmental review process to examine a reasonable range of approaches to minimize environmental impacts while achieving most of the Project objectives. Potential alternatives to be assessed could include the following:

- Construction of a new Intermodal Container Rail Yard to serve marine terminals within the Middle Harbor and Southeast Harbor planning areas;
- Redesigned Alternative with less dredging/filling;
- Non-Containerized use of the Pier E Marine Terminal;
- Use of other Ports (i.e., Port of Oakland) to construct a new marine terminal;
- Expansion of marine terminals within Southern California but outside of the Long Beach Harbor District;
- Inland Port (an intermodal facility for exclusive handling of international cargo);
- Lightering (Lightering involves offloading a portion of a fully loaded vessel's cargo onto smaller vessels until the larger vessel's draft has been reduced to the point where it can safely transit to the terminals);
- Marine Terminal Automation;
- Alternative Container Ground Delivery Systems, including non-diesel-fueled movement of containers between the Port and off-dock intermodal facilities (e.g., magnetic levitation systems);

- Off-Site Backland Alternatives (i.e., using existing backland areas outside the Pier E area but still within the Port);
- Other Sites within the Long Beach Harbor District;
- No Federal Action Alternative (This alternative would include construction and operation of all upland components but would not include any in-water construction activities that require federal permits.); and
- No Project/No Growth Alternative (This alternative would consider what would reasonably be expected to occur on the site in the absence of issuance of both a federal permit by the USACE and a discretionary land use decision by the Port).

## 7.0 EVALUATION OF POTENTIALLY SIGNIFICANT EFFECTS

The environmental analysis of the proposed Project will address the potentially significant effects identified in the Environmental Assessment Checklist (see section 9.0). The Checklist uses the following terms:

- *Potentially Significant Impact:* Impacts would be potentially significant, and feasible mitigation has not been identified.
- *Potentially Significant Unless Mitigation Incorporated:* Impacts would be adverse and potentially significant, but can feasibly be mitigated to less than significant.
- *Less Than Significant Impact:* Impacts would be adverse, but less than significant.
- *No Impact:* No adverse impacts, or only beneficial impacts, would occur.

## 8.0 ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The environmental resources checked below would be potentially affected by this proposed Project. Each of these resources involves at least one impact that is a "Potentially Significant Impact," as indicated by the checklist provided in section 9.0.

| | | | | | |
|---|---|---|---|---|---|
| ☐ | Aesthetics | ☐ | Agriculture Resources | ☒ | Air Quality |
| ☒ | Biological Resources | ☒ | Cultural Resources | ☒ | Geology /Soils |
| ☒ | Hazards & Hazardous Materials | ☒ | Hydrology / Water Quality | ☐ | Land Use / Planning |
| ☐ | Mineral Resources | ☒ | Noise | ☐ | Population / Housing |
| ☐ | Public Services | ☐ | Recreation | ☒ | Transportation/Traffic |
| ☐ | Utilities / Service Systems | ☒ | Mandatory Findings of Significance | | |

## 9.0 EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on

project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers are preliminary and take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significant.

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## ENVIRONMENTAL ASSESSMENT CHECKLIST

| | | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| **I.** | **AESTHETICS.** Would the project: | | | | |
| a. | Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b. | Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☒ | ☐ |
| c. | Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| d. | Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

### Discussion:

***I.a-c).*** The proposed Project site is located in the Middle Harbor and Northeast Harbor Planning Districts, on Piers D, E, and F in the highly industrialized inner complex of the Port. There are no scenic vistas within the Project vicinity; however, two sensitive public view sites that are recognized in the Port's Master Plan are located in the Project region: ground level views along the boundary of Queensway Bay; and ground level views along Harbor Scenic Drive from southbound lanes south of Anaheim Street. Although proposed Project development and activities would be potentially visible from these sensitive public vantage points, views of the proposed marine container cargo facilities (e.g., container cargo storage areas, cranes, ships, rail yard, lighting, fencing, and signage) from off-site public vantages would generally be blocked by adjacent facilities. Additionally, Pier E consolidated marine terminal operations would be consistent with the general industrial/commercial nature of the Port and would not significantly impact the existing visual character or quality of the sites and surroundings. Overall, the aesthetic impacts of the Project on the Port landscape are expected to be less than significant. Photographic imagery and visual simulations will be included in the EIS/EIR in the spirit of full disclosure.

***I.d).*** The proposed Project would install lighting on approximately 48 acres of new landfill and reconfigure the existing lighting (as needed) on 294 acres of existing marine terminal facilities at Piers E and F. Ambient nighttime lighting levels would be increased as a result of the need for illumination of marine terminal equipment, the proposed new containerized cargo storage facilities, and operations associated with additional vessel calls and truck trips. Information about the Project's less-than-significant impact relative to light and glare will be included in the EIS/EIR in the spirit of full disclosure.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **II. AGRICULTURAL RESOURCES.** In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project: | | | | |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? | ☐ | ☐ | ☐ | ☒ |
| b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

***II.a).*** The California Department of Conservation's Farmland Mapping and Monitoring Program identifies categories of agricultural resources that are significant and therefore require special consideration. According to the Department of Conservation's Important Farmland Map, the proposed Project site is not in an area designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 1999). No farmland or agricultural resources or operations exist on the proposed Project site or would be converted by Project implementation. This issue will not be addressed in the EIS/EIR.

***II.b-c).*** No agricultural resources or operations exist within the proposed Project vicinity or adjacent areas. The Project site is not zoned for agricultural use; the Project site is zoned for Port-related Industrial (IP) under the Port of Long Beach Port Master Plan (PMP) (Long Beach Harbor Department 1999); and no Williamson Act contracts apply to the Project site. Therefore, these issues will not be addressed in the EIS/EIR.

| | | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| **III.** | **AIR QUALITY.** When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a. | Conflict with or obstruct implementation of the applicable air quality plan? | ☒ | ☐ | ☐ | ☐ |
| b. | Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☒ | ☐ | ☐ | ☐ |
| c. | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | ☒ | ☐ | ☐ | ☐ |
| d. | Expose sensitive receptors to substantial pollutant concentrations? | ☒ | ☐ | ☐ | ☐ |
| e. | Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

The proposed Project and alternatives would result in potentially significant impacts on air quality and human health associated with construction and operations activities. The EIS/EIR will include an air quality analysis and a health risk assessment prepared using the methodology described in the *Draft Air Quality and Risk Assessment Analysis Protocol for Proposed Projects at the Port of Long Beach* dated October 17, 2005, hereby incorporated by reference and available at the Port of Long Beach Planning Division. The protocol includes analytical assumptions, techniques, and methodologies identified within South Coast Air Quality Management District (SCAQMD), California Air Resources Board (CARB), and Office of Environmental Health Hazard Assessment (OHHEA) guidance documents; relevant laws and regulations frames the basic approach to air quality and health risk analyses, impact evaluation, and mitigation. Following are brief explanations for the Checklist responses.

***III.a.).*** Project operations would result in increases in air emissions compared with current levels of activity from the Project site. Over time the throughput of containerized cargo products moved through the consolidated marine terminal would increase. Emissions from transport vessels, terminal equipment (cranes, cargo handlers, forklifts, and yard vehicles), heavy duty truck, trains, and employee vehicles would likely increase and could interfere with the SCAQMD's 2003 Final Air Quality Management Plan. This impact will be assessed in the EIS/EIR.

***III.b&c).*** Project construction would result in fugitive dust and combustion emissions. Project operations would result in increased emissions of criteria air pollutants compared with current levels of activity. Over time the throughput of containerized cargo products moved through the new consolidated marine terminal would increase. The impacts resulting from the cumulative impact of these emissions with emissions generated by other projects in the Air Basin will be assessed in the EIS/EIR.

***III.d).*** Construction activities would potentially expose nearby occupants to air pollution conditions in the form of dust and exhaust emissions. Compliance with SCAQMD rules and regulations, including implementation of recommended control measures, would be required during the construction phases of the proposed Project. Operational activities could expose nearby sensitive receptors to increased levels of air pollution. In addition to evaluating the level of sensitive receptor exposure to the criteria pollutants identified in the Federal Clean Air Act, the California Clean Air Act, and the National and California Ambient Air Quality Standards, an evaluation of the exposure and impacts of toxic diesel combustion emissions will be added as a subject of special concern. These impacts will be discussed in the EIS/EIR.

***III.e).*** Short-term objectionable odors associated with the use of diesel powered heavy equipment and paving and asphalting activities could occur on a short-term basis in areas near the proposed Project construction sites. Odors produced from the operation of the proposed facilities would be activity-dependent and are likely to be similar to the odors produced from existing container terminal operations. The impacts associated with these odors are expected to be less than significant. Information on this topic will be disclosed in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES.** Would the project: | | | | |
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☒ | ☐ | ☐ | ☐ |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? | ☒ | ☐ | ☐ | ☐ |
| c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☒ | ☐ | ☐ | ☐ |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

***IV.a).*** The California brown pelican and the California least tern, both of which are on federal and state endangered species lists, are found in the harbor area, as are peregrine falcons which are identified on the state endangered species list. Brown pelicans and peregrine falcons commonly use the breakwaters within the harbor for roosting and foraging, and may occasionally perch on structures and forage in the Project area. Although no least tern foraging area is known or expected to occur in the Project area, least terns could potentially fly over the Project site. Construction activities conducted during the nesting season (April through August) may have the potential to adversely affect these species.

The proposed Project area is located in an area designated as Essential Fish Habitat (EFH) for coastal pelagics and the Pacific groundfish species (SAIC 2001). Turbidity and other disturbances associated with construction activities would temporarily affect EFH in the Project area.

Marine vessel discharge of ballast water has the potential to transport invasive species to harbor waters. However, the State of California implemented a Ballast Water Management Plan in January 2000 to minimize the risk from invasive species. The plan mandates ballast water exchange in mid-ocean waters (200 nautical miles from land) or retention of all ballast water while berthed at the Port, to minimize potential impacts.

Port habitat credits from restoration of the Bolsa Chica wetlands are available to offset the loss of project habitat.

These issues will be addressed in the EIS/EIR.

***IV.b).*** Construction activities, including dredging and filling, have the potential to affect marine organisms, particularly benthic communities, in the Project vicinity through temporary alteration of water quality (turbidity) and noise/vibration (SAIC 2001). Demolition of existing wharf structures and filling Slip 1 and the East Basin would result in the permanent loss of hard substrate, soft bottom, and water column (fish) habitats; however because these biological resources are not identified as sensitive natural communities, Project-related impacts would be less than significant. Information on this topic will be included in the EIS/EIR in the spirit of full disclosure.

Additionally, accidents during construction activities could result in the release of pollutants including petroleum products (fuel and lubricants) from vessels or other equipment into harbor waters that could affect birds and invertebrates. These issues will be evaluated in the EIS/EIR.

***IV.c).*** No known federally protected wetlands exist in or near the Project site. Therefore, this issue will not be addressed in the EIS/EIR.

***IV.d).*** The proposed Project is not expected to interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, except as discussed above for sensitive species and EFH. However, containerized cargo throughput during Project operations would result in vessels berthing at the marine terminal, and could increase the potential for spills, accidents, or leaks of hazardous materials that could affect biological organisms and nursery areas of the harbor.

The potential transport of invasive species to harbor waters via marine vessel discharge of ballast water would be minimized through compliance with regulations delineated in the State of California Ballast Water Management Plan.

These issues will be addressed in the EIS/EIR.

***IV.e).*** The proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance at Piers D/E/F. Therefore, this issue will not be addressed in the EIS/EIR.

***IV.f).*** The Project site is not located in an adopted Natural Communities Conservation Plan (NCCP) area or Habitat Conservation Plan (HCP) area. The NCCP program, initiated in 1991 under the State's Natural Community Conservation Planning Act, is administered by the California Department of Fish and Game (CDFG 2005). A cooperative planning effort between the resource agencies and development community, the NCCP program provides for the conservation of biological diversity by implementing regional protections for plants, wildlife, and habitats, while allowing compatible

development. The only approved NCCP near the Port is the Palos Verdes Peninsula Sub-Regional Plan, which was designed to protect coastal sage scrub and does not include Port lands.

HCPs are administered by the U.S. Fish and Wildlife Service and are intended to identify how project impacts on endangered species will be mitigated (USFWS 2005). HCPs are required for Incidental Take Permits issued for otherwise lawful activities that may harm listed species or their habitats. To obtain a permit, an applicant must submit an HCP outlining proposed actions to "minimize and mitigate" the impact of the permitted take on the listed species. There are no HCPs in place for the Port, therefore this issue will not be addressed in the EIS/EIR.

The County of Los Angeles has also established 61 Significant Ecological Areas (SEAs) (County of Los Angeles 1992). Los Angeles County developed the concept of SEAs in the 1970s simultaneously with development of the original County General Plan. SEAs were originally defined to correspond with the Land Use and Open Space Elements of the County General Plan. There are no established or proposed SEAs within the Port. Therefore, this issue will not be addressed in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES.** Would the project: | | | | |
| a. Cause a substantial adverse change in the significance of a historical resource as defined in California Environmental Quality Act (CEQA) Section 15064.5? | ☒ | ☐ | ☐ | ☐ |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ☒ | ☐ | ☐ | ☐ |
| c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☒ | ☐ |
| d. Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

***V.a).*** The proposed Project is located in the Middle Harbor of the Port on Piers D, E, and F. Parts of the Project site have been in continuous use for marine terminal facilities since the 1950's and 1960's. Proposed construction activities would require relocation and/or removal of existing facilities, including Baker Commodities, Inc., Tidelands oil well facilities and pipelines, Seaside Rail Yard, and ancillary infrastructure. Although these facilities are common examples of cargo terminal facilities found throughout the Port, these structures will be evaluated for their eligibility as historic resources under the National Historic Preservation Act (NHPA) regulation 36 CFR Part §§60.4 and CEQA Section 15064.5 criteria. Proposed construction activities (demolition, relocation, excavation) in the vicinity of these structures could potentially affect the significance of a historic resource. This issue will be addressed in the EIS/EIR.

***V.b).*** Most of Piers D, E, and F are landforms resulting from placement of modern fill within the ancestral San Pedro Bay. Due to their modern origin, no prehistoric or historical archaeological resources would be expected within those areas. The northern portion of the Project site coincides with the original beachfront and backbeach area, and in historic times was a light commercial and industrial area known as the Town Lot. However, the area has been redeveloped several times in the past 50 years. Therefore, it is highly unlikely any unknown, intact archaeological deposits exist within soils in these Project areas. Although artifacts are not expected, this issue will be addressed in the EIS/EIR.

The majority of the Middle Harbor area, including the areas adjacent to Piers D, E, and F, has been historically dredged to provide deeper channels and turning basins to allow for larger container vessels to call at the Port. However, proposed dredging and filling activities could affect underwater prehistoric archaeological sites in the Project area during construction of proposed improvements. As proposed construction activities would require dredging and filling to construct the Pier E and F consolidated marine cargo terminal, the potential for encountering intact historic materials (i.e.,

submerged shipwrecks) or representative samples of historic resources within these dredged areas will be addressed in the EIS/EIR.

***V.c).*** The Project area encompasses submerged land, existing berths/wharves, and backland areas on Piers D/E/F in the Middle Harbor area. Any rock material that contains fossils has the potential to yield fossils that are considered unique or significant to science. Although the fill material may have been excavated from geological formations in which vertebrate fossils can be found, once these sediments have been removed from their original depositional context, the significance of any fossil has been compromised. Therefore, it is unlikely any unknown, intact paleontological deposits exist within soils in the Project area. However, in the highly unlikely event that intact paleontological resources are encountered during construction, this issue will be addressed in the EIS/EIR in the spirit of full disclosure.

Existing oil wells in the Project area (i.e., Pier E) would be abandoned and removed as part of the proposed Project. Any remaining oil or natural gas reserves underlying the site could be accessed from off-site locations through directional drilling techniques, minimizing impacts on unique geologic features and natural resources.

***V.d).*** As the Project site is a result of modern fill placement within the ancestral San Pedro Bay and has been extensively redeveloped over the years, no human remains would be expected within the Project area. This issue will not be addressed in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. GEOLOGY AND SOILS.** Would the project: | | | | |
| a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☒ | ☐ | ☐ | ☐ |
| ii. Strong seismic groundshaking? | ☒ | ☐ | ☐ | ☐ |
| iii. Seismic-related ground failure, including liquefaction? | ☒ | ☐ | ☐ | ☐ |
| iv. Landslides? | ☐ | ☐ | ☐ | ☒ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☒ | ☐ | ☐ | ☐ |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☒ | ☐ | ☐ | ☐ |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | ☒ | ☐ | ☐ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

***VI.a.i-ii).*** The Port is located in the southwestern portion of the Los Angeles Basin, which is an area of know seismic activity. The proposed Project site is located near 17 potentially active faults within a 60-mile radius. The Palos Verdes Hills, Newport-Inglewood, Whittier, and San Andreas faults have the greatest potential to affect the Project area. The risk of seismic hazards such as fault rupture cannot be avoided; however, implementation of standard engineering design measures is required by the State of California Uniform Building Code to minimize potential earthquake shaking impacts. The general intent of building and construction design codes is to minimize structural damage resulting from a

seismic event. The exposure of people to fault rupture is a potential risk with or without any project undertaken in the harbor. Potential impacts will be discussed in the EIS/EIR.

***VI.a.iii).*** The Project area may be impacted by seismic-related ground failure, including liquefaction since it is constructed on a hydraulically placed fill. Within the Port, the existing hydraulically placed fills consist predominately of loose to medium-dense, water saturated sand and silts that are subject to seismically induced ground failure. Standard engineering and design measures would be incorporated into the Project design features. However, the exposure of people to seismic-related ground failure is a potential risk with or without any project undertaken in the harbor. This issue will be discussed in the EIS/EIR.

***VI.a.iv).*** The Project site is located on relatively flat landfill and is surrounded by similar topography. In-water construction activities associated with excavating and filling in existing submerged lands would result in the temporary disruption to localized submarine depositional processes and modifications to bathymetry (SAIC 2001); however, stabilization and containment of dredge slopes with quarry run rock and armor stone would avoid destabilization of adjacent on-site soils. Accordingly, there is no potential for the proposed Project to induce or be affected by landslides. This issue will not be addressed in the EIS/EIR.

***VI.b).*** The proposed Project would involve ground disturbance associated with grading, excavations, and general construction. Such ground disturbance could potentially result in erosion-induced siltation of harbor waters. Erosion can be reduced through incorporation of Best Management Practices. Potential erosion and erosion control will be discussed in the EIS/EIR.

***VI.c).*** The Project site is constructed on landfill, which may become unstable. Lateral spreading and liquefaction could both occur in the event of a large earthquake. Subsidence in the Port of Long Beach area was first observed in the 1920s and increased between the 1930s and 1950s as a result of the removal of oil from the Wilmington Oil Field. Secondary injection of water into the oil-depleted zones in 1958 reduced the rate of subsidence and allowed partial rebound of the subsided areas. As long as the balance between extraction and fluid injection is maintained, future subsidence is not expected to be a major concern. Proposed dredging and filling would alter the existing submarine topography and modify the bathymetry. Although these activities are located in predominately disturbed areas where extensive dredging and filling has been completed, the potential for unstable earth conditions, disruption, displacement and/or compaction of soil will be discussed in the EIS/EIR.

***VI.d).*** Expansive soils are defined as those that exhibit shrink-swell behavior, which is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments caused by serial wetting and drying. Over an extended period of time, expansive soils can cause structural damage, usually as the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. However, standard soils testing and associated geotechnical engineering would reduce adverse effects associated with such soils. The potential for expansive soils will be discussed in the EIS/EIR.

***VI.e).*** The City of Long Beach Water Department provides wastewater service to all areas in its jurisdiction, including the Project site. Project implementation would not require septic tanks or alternative wastewater disposal systems. This issue will not be addressed in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VII. HAZARDS AND HAZARDOUS MATERIALS.** Would the project: | | | | |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☒ | ☐ | ☐ | ☐ |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☒ | ☐ | ☐ | ☐ |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☒ | ☐ | ☐ | ☐ |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

***VII.a-b).*** The proposed Project is not expected to result in the use, storage, and/or distribution of significant quantities of hazardous materials or toxic substances. Contaminated sediments could be encountered during proposed dredging, excavation, and associated construction activities. Any hazardous materials encountered during Project construction would be handled in accordance with existing regulations. Specifically, removal and/or relocation of the Pier E Tidelands oil well facilities and pipelines would potentially result in increased exposure of contaminated soil and/or groundwater during these construction activities. These safety concerns can be minimized through incorporation of a site-specific health and safety plan and a contingency plan for potentially encountering contaminated soil and/or water. Increased throughput of containerized cargo at the consolidated marine terminal would increase the potential for spills, accidents, and/or leaks of hazardous materials. These potentially significant impacts will be evaluated in the EIR.

***VII.c).*** There are no schools located within one-quarter mile of the Project site. Exposure of contaminated soil and/or groundwater during construction could result in emissions or handling of contaminated soil/groundwater in the Project vicinity; however, these safety concerns can be reduced with site-specific health and safety plan and a contingency plans. The anticipated increase in cargo product throughput would result in an increase in emissions from marine vessels. However, these releases would not occur within a 0.25 mile of an existing or proposed school. This issue will not be evaluated in the EIS/EIR.

***VII.d).*** The Project area could potentially be located on documented or undocumented hazardous materials/waste sites. The Department of Hazardous Substance Control (DTSC) Hazardous Waste and Substances Site List (Cortese List) will be reviewed to determine whether the Project site is included. Exposure of contaminated soil and/or groundwater during construction could result in a safety hazard to on-site workers. These safety concerns can be reduced through incorporation of a site-specific health and safety plan and a contingency plan for potentially encountering contamination in the subsurface. The proposed increase in throughput of containerized cargo could also increase the risk of spills, accident, or leaks. These issues will be discussed in the EIS/EIR.

***VII.e-f).*** The Project site is not located within an airport land use plan area, within two miles of a public airport or a public use airport, or within the vicinity of a private airstrip. Project activities would not result in a safety hazard for people residing or working in the Project site vicinity. The closest airport, Long Beach Airport, is located approximately 8 miles northeast of the Project site. These issues will not be evaluated in the EIS/EIR.

***VII.g).*** The Project site would receive and distribute general containerized cargo products (e.g., electrical and mechanical machinery and parts; manufactured plastic products), in compliance with existing emergency response and evacuation plans. The proposed Project would incorporate preventative planning to assure that the possible interference with emergency response and evacuation plans does not occur during construction activities and subsequent operations. Although proposed Project actions are not expected to interfere with emergency response and evacuation plans, project compliance will be discussed in the EIS/EIR in the spirit of full disclosure.

***VII.h).*** There are no wildlands adjacent to or in the general Project vicinity. The majority of the proposed Project site would remain earthen or paved, the same as under existing conditions, and no increased fire hazard is expected. Therefore this impact will not be discussed in the EIS/EIR.

| | | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| **VIII.** | **HYDROLOGY AND WATER QUALITY.** Would the project: | | | | |
| a. | Violate any water quality standards or waste discharge requirements? | ☒ | ☐ | ☐ | ☐ |
| b. | Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☐ | ☒ |
| c. | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| d. | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| e. | Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☒ | ☐ |
| f. | Otherwise substantially degrade water quality? | ☒ | ☐ | ☐ | ☐ |
| g. | Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | ☒ |
| h. | Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |
| i. | Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☐ | ☒ |
| j. | Inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

***VIII.a).*** The Project would fill 48 acres of existing submerged lands in Slip 1 and the East Basin, which would affect existing currents and water movement within the Project area. During construction and operation of the proposed Project, stormwater runoff and other discharges would be managed in accordance with applicable Regional Water Quality Control Board (RWQCB) regulations. Runoff of sediment, construction materials, and potential spills of fuels and/or lubricants during construction activities would potentially impact water quality. Potential impacts can be reduced with implementation of a Storm Water Pollution and Prevention Plan (SWPPP), a Spill Prevention Control and Containment Plan (SPCCP) and a Source Control Program. Information on this topic will be disclosed in the EIS/EIR.

***VIII.b).*** Groundwater within the vicinity of the Project site has significant saltwater intrusion and is therefore unsuitable for use as drinking water. The proposed Project would not directly change the quantity of groundwater or have any impact upon aquifers, as groundwater beneath the Project area would not be utilized as part of the Project. This issue will not be addressed in the EIS/EIR.

***VIII.c-f).*** Dredge and fill activities would affect water circulation through altered channel configuration in the middle harbor area. In-water construction activities would affect water and sediment quality through temporary degradation of water quality (turbidity), accidental spills of pollutants from equipment, and permanent capping of sediment containing pollutants. Filling Slip 1 and redevelopment of Pier F would generate suspended sediments that would be potentially transported by tidal currents into adjacent harbor areas. Additionally, surcharge activities associated with de-watering and consolidated fill materials would increase turbidity in harbor areas adjacent to the Project site (SAIC 2001). Impacts can be reduced with implementation of a SWPPP and a SPCCP. Information on this topic will be provided in the EIS/EIR.

Wharf and container yard redevelopment activities would involve ground disturbance associated with grading, excavations, and general construction. Such ground disturbance could potentially result in erosion-induced siltation of harbor waters. Erosion can be reduced through implementation of Best Management Practices and a SWPPP. Information on this topic will be provided in the EIS/EIR.

The Project would result in an increase in 48 acres of additional fill area, and corresponding increase of potential surface runoff into harbor waters. However, the stormwater drainage system would be designed to accommodate this increase in runoff. Transport, off-loading, storage, and distribution of containerized cargo products could increase the chance of spills or leaks that could release hazardous materials into the marine environment and impact overall water quality. Potential impacts on harbor waters will be evaluated in the EIS/EIR.

***VII.g).*** No housing is proposed as part of the Project. Therefore, this issue will not be evaluated in the EIS/EIR.

***VIII.h).*** The Project site is within the 100-year floodplain of the Los Angeles River and Inner Harbor Area, as designated by the Federal Emergency Management Agency (FEMA). However, proposed structures included in the Project would be constructed so as not to impede or redirect flood flows. Information on this topic will be provided in the EIS/EIR in the spirit of disclosure.

***VIII.i).*** There are no levees or dams in the vicinity that would be subject to failure and expose people or structures associated with the Project to a significant risk of loss, injury, or death involving flooding. Therefore, this issue will not be evaluated in the EIS/EIR.

***VIII.j).*** The Project site is sufficiently flat and distant from any hillsides or canyons that mudflows would not be caused by the Project. A tsunami is a large sea wave produced by submarine earth movement or volcanic eruption. A seiche is a seismically induced oscillation or wave in a confined body of water, such as a lake, reservoir, or harbor. The Project site is located in an area potentially subject to partial flooding due to a tsunami or a seiche in the Inner Harbor area. Information on this topic will be provided in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. LAND USE AND PLANNING.** Would the project: | | | | |
| a. Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ |
| c. Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

The EIS/EIR will, for informational purposes, describe the land-use plans and policies applicable to the proposed Project site and describe how the proposed Project would be consistent with those plans and policies.

***IX.a).*** The Project site is located entirely within the Port boundaries. The site, which is zoned for heavy industrial use, does not divide any established communities. Therefore, this issue will not be discussed in the EIR.

***IX.b).*** The Project site is located in the Port's Planning District 5 (Middle Harbor District), which is characterized by primary Port facilities, oil production, and ancillary Port infrastructure. Development plans for this Planning Area include port-related industrial and commercial development, waterfront general cargo, containerized cargo handling, marine terminals, consolidate oil well facilities, and provisions for on-dock rail facilities (Long Beach Harbor Department 1999). Section V of the Port of Long Beach Port Master Plan (PMP) sets forth environmental goals and recommendations for protection, maintenance, enhancement, and restoration of the "overall quality of both the man-made and the natural coastal environment." Project consistency with the PMP will be presented in the EIS/EIR in the spirit of full disclosure.

***IX.c).*** There is currently only one approved Habitat Conservation Plan or Natural Community Conservation Plan in the vicinity of the Project, i.e., the Palos Verdes Peninsula Sub-Regional Plan. This plan has been designed to protect coastal sage scrub; this area is not located within or adjacent to the Project site. Therefore, no habitat conservation plans or natural community conservation plans apply to the Project location. Therefore, this issue will not be discussed in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **X. MINERAL RESOURCES.** Would the project: | | | | |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☒ | ☐ |
| b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☒ | ☐ |

## Discussion:

***X.a-b).*** The Project site is located south of the Wilmington Oil Field, one of several primary sources of crude oil (petroleum) in the Los Angeles Basin. Project construction activities would require the removal and/or relocation of Tidelands oil well facilities and pipelines on Pier E. Any remaining oil or natural gas reserves underlying the site could be accessed from off-site locations through directional drilling techniques (SAIC 2001). Proposed marine terminal operations would not increase existing rates of crude oil extraction from Pier E facilities or affect production and abandonment plans for any onsite wells. Although proposed actions are not expected to result in the loss of availability of a known locally important mineral resource, information on this topic will be included in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. NOISE.** Would the project result in: | | | | |
| a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☒ | ☐ | ☐ | ☐ |
| b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☒ | ☐ | ☐ | ☐ |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☒ | ☐ | ☐ | ☐ |
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☒ | ☐ | ☐ | ☐ |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |
| f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

## Discussion:

***XI.a).*** The Project site is located in an industrialized area within the Port. Although sensitive noise receptors (residences, schools, parks, community facilities) are located outside the noise exposure area, construction activities (demolition, excavation, dredging, pile-driving) would potentially generate substantial noise levels that people could be exposed to on a periodic basis. Project operational activities could also result in increased noise levels above existing conditions. Potential noise impacts will be discussed/evaluated in the EIS/EIR.

***XI.b).*** Construction activities could generate excessive groundborne vibration or groundborne noise levels on a periodic basis. Rail movement of containerized cargo associated with Project operations could also generate excessive groundborne vibration. These issues will be discussed in the EIS/EIR.

***XI.c).*** Project operations (i.e., truck trips and rail operations) could result in increased noise above ambient conditions. However, onsite sources of increased noise (i.e., marine terminal and container storage areas, and freight transportation by truck and rail) would not be located adjacent to any

sensitive receptors; terminal facilities would be located outside the Port's noise exposure area (at least one mile from any sensitive noise receptor). These issues will be discussed in the EIS/EIR.

***XI.d)***. Construction of the consolidated marine terminal, including in-water construction activities and container yard redevelopment, would potentially generate temporary or periodic increases in ambient noise levels. This issue will be discussed in the EIS/EIR.

***XI.e-f).*** The Project is not located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The Project is not located within the vicinity of a private airstrip. Therefore, these issues will not be discussed in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. POPULATION AND HOUSING.** Would the project: | | | | |
| a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |
| b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

***XII.a).*** The proposed Project involves construction and operation of a consolidated containerized cargo terminal and ancillary infrastructure. These facilities are designed to accommodate projected increases in containerized cargo throughput volumes needed to meet market demand. Growth-inducing impacts of the Project are expected to be less than significant; however, information on this topic and the Project-related impacts will be provided in the EIS/EIR.

***XII.b).*** There is no housing within the proposed Project boundaries that would be displaced as a result of this Project. Therefore, this issue will not be discussed in the EIS/EIR.

***XII.c).*** The Project would not result in the displacement of any persons. Therefore, this issue will not be discussed in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. PUBLIC SERVICES.** | | | | |
| a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| i Fire protection? | ☐ | ☐ | ☒ | ☐ |
| ii Police protection? | ☐ | ☐ | ☒ | ☐ |
| iii Schools? | ☐ | ☐ | ☒ | ☐ |
| iv Parks? | ☐ | ☐ | ☒ | ☐ |
| v Other public facilities? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

***XIII.a.i).*** The proposed Project would include fire suppression and emergency response systems, as required by the Long Beach Fire Department. The suppression and emergency response systems would be designed in accordance with fire department recommendations and other applicable design standards. Although the increase in demand for fire services is expected to be less than significant, increases in containerized cargo throughput during future operations could require additional fire protection. Information on fire service and Project-specific impacts will be provided in the EIS/EIR.

***XIII.a.ii).*** Police services for the Port are provided by the City of Long Beach Police Department (LBPD) and the Port Harbor Patrol. LBPD and the Harbor Patrol enforce municipal, state and federal laws, as well as Port tariff regulations. The Harbor Patrol maintains 24-hour land and water patrols within the Port; Harbor Patrol currently patrols the Project area. Each Port terminal typically maintains its own security personnel, as would the proposed Pier E marine terminal. Although additional police protection may be required from time to time to manage traffic or respond to calls as a result of increased activity during future operations, such impacts would be periodic and short-term. Overall, the Project impact on police service is expected to be less than significant. This topic will be included in the EIS/EIR in the spirit of disclosure.

***XIII.a.iii).*** Although expected to be minimal, the increase in employment resulting from the proposed Project will be evaluated in the EIS/EIR to determine its impacts on schools. Although the effect of the Project on schools is expected to be less than significant, this topic will be included in the EIS/EIR in the spirit of disclosure.

***XIII.a.iv)***. The proposed Project could result in some increase in the number of employees, but this is not expected to substantially increase demands on existing recreational facilities. Notwithstanding, this issue will be discussed in the EIS/EIR in the spirit of disclosure.

***XIII.a.v).*** The U.S. Coast Guard (USCG) is a federal agency responsible for a broad range of regulatory, law-enforcement, and emergency-response duties. The USCG mission includes maritime safety, maritime law enforcement, protection of natural resources, maritime mobility, national defense, and homeland security. Within the Port, the USCG's primary responsibility is the safety of vessel traffic in Port channels and coastal waters. In cooperation with the Marine Exchange, the USCG operates the Vessel Traffic Information Service (VTIS), which is intended to enhance vessel safety in the main approaches to the Port of Long Beach and Los Angeles.

The Project would increase marine vessel calls at Pier E by approximately 179 ship visits per year by the year 2023, and could increase demand for the services of the USCG. The increased vessel traffic could also increase the safety risk to recreational boaters in the Middle Harbor, as well as the risk to other ships, other Port terminals, and workers at the Port. While impacts are anticipated to be less than significant, these issues will be addressed in the EIS/EIR in the spirit of disclosure.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIV. RECREATION.** | | | | |
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☒ | ☐ |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

***XIV.a-b)*** There is expected to be some minor increase in the number of employees, however, this is not expected to increase demands for parks or other recreational facilities beyond what currently exists. Information on the Project's less-than-significant impacts on recreational facilities will be disclosed in the EIS/EIR.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XV. TRANSPORTATION/TRAFFIC.** Would the project: | | | | |
| a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | ☒ | ☐ | ☐ | ☐ |
| b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | ☒ | ☐ | ☐ | ☐ |
| c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | ☒ |
| d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |
| e. Result in inadequate emergency access? | ☒ | ☐ | ☐ | ☐ |
| f. Result in inadequate parking capacity? | ☐ | ☐ | ☐ | ☒ |
| g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | ☐ | ☐ | ☒ | ☐ |

## Discussion:

***XV.a-b).*** Increased vehicular movement would occur during construction and as a result of increased Pier E terminal operations. Site preparation and construction activities would generate additional traffic on Project area roadways as a result of trucks transporting soils, fill material, and equipment to the site and construction worker vehicular trips. Traffic generated during site construction/preparation would result in adverse short-term impacts on roadways in the Project vicinity. These impacts will be evaluated in the EIS/EIR.

Commensurate with the anticipated increase in demand for goods (throughput), the Pier E consolidated container terminal would result in increased traffic volumes on roadways in the Project vicinity. Project-generated traffic would increase delays at driveways to other terminals located on Pier D Street/Pier D Avenue (SAIC 2001). Operation of the Pier E expanded rail yard would increase on-dock rail usage and reduce the number of truck trips which might otherwise occur were the existing rail yard

to remain its existing size (approximately 10,000 track feet). Project-related impacts on the following circulation facilities will be evaluated, as necessary, in the EIS/EIR:

- Pico Avenue @ Pier G Avenue and Harbor Plaza
- Pico Avenue @ Pier E Street and Ocean Boulevard
- Pico Avenue @ Ocean Boulevard
- Pico Avenue @ Broadway
- Pico Avenue @ Pier D Street
- Pico Avenue @ Pier C Street
- Pico Avenue @ Pier B and 9th Streets
- Harbor Scenic Drive @ Ocean Boulevard
- Pier B Street @ Anaheim Way
- Farragut Avenue @ Anaheim Street
- I-710 Long Beach Freeway, north and south of the I-405 San Diego Freeway
- I-405 San Diego Freeway, north and south of the I-710 Long Beach Freeway
- I-110 Harbor Freeway, north and south of the I-405 San Diego Freeway
- SR 47 Terminal Island Freeway
- SR 91 Artesia Freeway, east and west of the I-710
- Los Angeles County Congestion Management Program facilities

***XV.c).*** The proposed Project would not construct or operate facilities that would alter air traffic patterns or result in substantial air traffic safety risks. Accordingly, this topic will not be included in the EIS/EIR.

***XV.d).*** The proposed entrance/egress gates at the Pier E marine terminal would be designed to improve traffic flow and improve safety. However, due to the close proximity of all Pier D Street driveways, traffic conditions could be unsafe as trucks and autos exiting from the driveways would be competing for the same gaps in traffic (SAIC 2001). In addition, the existing high traffic volumes and grade differences on Pier D Street further contribute to unsafe operating conditions (i.e., inadequate sight distance). This issue will be discussed in the EIS/EIR.

In-water construction activities (fill, wharf construction, dikes) would occur in the East Basin; however, due to the interior location of the affected berths and dike/fill areas, these activities would not substantially interfere with marine vessel transportation (SAIC 2001). Increased throughput at the Pier E marine cargo terminal would result in increased vessel calls in the Middle Harbor vicinity. These potential impacts will be evaluated in the EIS/EIR.

***XV.e).*** Increased vehicular movements would occur and could inhibit emergency access. However, the design of the Project would take into account emergency access to minimize impacts on emergency services in the Project vicinity. This issue will be discussed in the EIR.

***XV.f).*** Facility parking areas already exist and are expected to be expanded and/or redeveloped as part of the Project. Traffic from the proposed Project would exit onto Pier D Street and proceed east to Pico Avenue. Although existing on-street parking may need to be modified (i.e., relocated onto adjacent Port land) to improve circulation, such parking and circulation improvements are expected to be positive and less than significant; therefore further discussion of parking issues will not be included in the EIS/EIR.

***XV.g).*** The Project is expected to have less than significant impact on alternative transportation policies or facilities such as the bus turnouts and bicycle facilities. Information on this topic will be provided in the EIS/EIR in the spirit of full disclosure.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVI. UTILITIES AND SERVICE SYSTEMS.** Would the project: | | | | |
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☒ | ☐ |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☒ | ☐ |
| e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
| g. Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

## Discussion:

The proposed Project is expected to result in construction- and operations-related impacts with respect to utility service system items XVI "a" through "g," above. Existing Port policies, programs, and requirements are expected to reduce: demand for off-site water treatment and electrical power; water consumption; solid waste generation; and discharge of storm water flows. (Refer to Section 5 of this NOP.) Detailed descriptions of the Project features and their associated reduction of impacts to levels less than significant will be provided in the EIS/EIR. The following paragraphs provide additional context for each utility subtopic.

***XVI.a).*** Project construction and operation activities would generate wastewater requiring treatment. However, the Project would be required to comply with the Sanitation District's requirements, and the impacts would be less than significant.

***XVI.b).*** The proposed Project would not require, or result in the need for construction of new water and wastewater treatment facilities. The existing on-site water and wastewater systems would need to be reconfigured to accommodate the additional water and wastewater demands.

***XVI.c).*** The proposed Project would require construction of new storm water drainage infrastructure to support Pier E container terminal operations. Additionally, modifications to the existing storm water drainage infrastructure to accommodate additional storm water runoff in the Project vicinity would be necessary.

***XVI.d).*** The Project would result in increased water demands to support construction activities and marine terminal operations. Water supply infrastructure would be constructed on Pier E to support consolidated terminal operations.

***XVI.e).*** The City of Long Beach Water Department provides sewer service to all areas within its jurisdiction, including the Project site. Adequacy of wastewater disposal service is evaluated based on conveyance capacity (typically via a gravity-driven underground pipeline network) and treatment capacity prior to discharge. The City's Water Department maintains sewer lines in the Project area; the City's wastewater is delivered to Los Angeles County Sanitation facilities, including the Joint Water Pollution Control Plant and Long Beach Water Reclamation Plant. The proposed Project would result in relatively minor increases in wastewater treatment service requirements.

***XVI.f).*** Construction demolition activities would generate substantial amounts of waste requiring disposal in a landfill. Proposed Pier E container terminal operations are anticipated to relatively small amounts of waste.

***XVI.g).*** The proposed Project would be in compliance with all federal, state, and local codes and regulations pertaining to the disposal of solid waste. These codes include Part 13 Title 42 - Public Health and Welfare of the California Health and Safety Code, and Chapter 39 Solid Waste Disposal - of the United States Code. This Project would also be compliant with AB 939, the California Solid Waste Management Act, which requires each city in the state to divert at least 50 percent of their solid waste from landfill disposal through source reduction, recycling, and composting. Most construction/demolition debris is crushed and reused for other construction projects in the Port. Because the Project would implement and be consistent with the procedures and policies detailed in these codes, there would be no impacts associated with consistency related to laws pertaining to solid waste disposal.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. MANDATORY FINDINGS OF SIGNIFICANCE.** | | | | |
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☒ | ☐ | ☐ | ☐ |
| b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☒ | ☐ | ☐ | ☐ |
| c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☒ | ☐ | ☐ | ☐ |

**Discussion:**

***XVII.a).*** As set forth, the proposed Project actions have the potential to degrade the quality of the environment with regard to several resource areas. These potential impacts will be evaluated in the EIS/EIR and where feasible, measures will be identified to mitigate these impacts.

***XVII.b).*** The EIS/EIR will evaluate potential cumulative impacts.

***XVII.c).*** The EIS/EIR will evaluate any potential substantial adverse effects on human beings.

## 10.0 DETERMINATION

**On the basis of this initial evaluation:**

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Robert Kanter 12/20/05

Signature: Robert Kanter, PhD — Date
Director of Planning and Environmental Affairs

## REFERENCES

California Department of Conservation. 1999. *Farmland Mapping and Monitoring Program.* Los Angeles County Important Farmland 1998 (map). Sacramento, California.

California Department of Fish and Game (CDFG). 2005. *Natural Community Conservation Planning.* Website: http://www.dfg.ca.gov/nccp/ Accessed September 15, 2005.

Fugro West, Inc., 2004. Preliminary Geotechnical Engineering Study, California United Terminal, Port of Long Beach, California, February 2004. Long Beach Harbor Department. 2005. Long Beach Harbor Department Green Port Policy "White Paper." August.

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Los Angeles County. 1992. County of Los Angeles Streamlined General Plan and Special Management Area Maps. Adopted November 25, 1980. Updated to 1992.

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Science Applications International Corporation (SAIC). 2001. Final Environmental Impact Report and Application Summary Report for the Piers D/E/F Terminal Redevelopment Project. January.

US Fish and Wildlife Service (US FWS). 2005. *Endangered Species, Habitat Conservation Plans.* Website: http://endangered.fws.gov/hcp/ Accessed September 15, 2005.

# REISSUED NOTICE OF PREPARATION

Date December 5, 2005 SCH #2002101141

To: Responsible and Trustee Agencies and Interested Parties

From: Robert Kanter, Director of Planning and Environmental Affairs

Subject: Gerald Desmond Bridge Replacement Project

The Port of Long Beach (Port) in cooperation with the California Department of Transportation and Federal Highways Administration (Caltrans/FHWA) will act as the lead agencies for the subject in accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act, respectively. The Port and Caltrans/FHWA will prepare a combined Environmental Impact Report (EIR) and Environmental Assessment (EA) for the project described below.

The Port and Caltrans/FHWA originally issued a Notice of Preparation (NOP) on October 24, 2002. Following issuance of the original NOP/Notice of Intent, a draft EIR/EA was released for public review on June 14, 2004, for a 60-day review period. Subsequent to the public comment period for the draft EIR/EA, the Port elected to add a Toll-Operation Alternative and to expand the limits of the proposed project study area. The project study area was expanded to assess the impacts associated with adding a toll district. The revised draft EIR/EA will incorporate quantitative analysis to assess the project's potential to cause growth-inducement within the Port and in surrounding communities.

As a result of the added Toll-Operation Alternative and the expanded project study area, the Port has reissued this NOP to afford responsible and trustee agencies the opportunity to provide comments and input on the revisions to the proposed project.

This reissued NOP is also to inform you that the following additional environmental factors are being considered to have potentially significant impacts and will be reanalyzed accordingly: light and glare, air quality, noise, traffic, and growth inducement.

***If you submitted comments in response to the October 2002 NOP, we have addressed those comment in the June 2004 draft EIR/EA and will also address them in the revised draft EIR/EA. Accordingly, we ask that you provide any additional comments, you may have on this NOP, at this time.*** We need to know the applicable permit and environmental review requirements of your agency and the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. This is important if your agency will need to use the EIR/EA when considering permits or approval for the project by your agency.

Along with a No-Build Alternative, a North-side Alignment Alternative and a Toll-Operation Alternative will be analyzed in the revised draft document as follows: 1) North-side Alignment Alternative (same as the North-side Alignment Alternative described in the June 2004 draft EIR/EA; and 2) Toll-Operation Alternative [either as part of a toll district scenario involving the

Gerald Desmond, Vincent Thomas, and Schuyler Heim bridges, or tolling only at the Gerald Desmond Bridge (same footprint as the North-side Alignment Alternative)].

The North-side Alignment Alternative assumes that the proposed new Bridge would operate similar to a freeway. The new bridge would be relinquished to Caltrans and would become part of Route 710.

The Toll-operation Alternative is assumed to have automatic License Plate Recognition (LPR) technology, and would operate without toll booths. Except for the toll element, the bridge design features would be the same as that of the previously analyzed alternatives.

The proposed project limits (i.e., bridge alignment alternatives and project improvements footprint) remain the same as that presented in the previously released draft EIR/EA. However, the project study area has been revised and expanded as follows: Willow/Sepulveda to the north, I-110 to the west, and the Los Angeles River to the east. The south end of the project study area has not changed, being located south of Ocean Boulevard. The Gerald Desmond Bridge/Ocean Boulevard portion of the project is located in the Middle Harbor and Terminal Island planning districts of the Port, and the I-710 portion is located in the Northeast Harbor Planning District. The Gerald Desmond Bridge is one of three bridges connecting surface highways to Terminal Island (see attached figure). The EIR/EA will consider whether the Toll-Operation alternative would cause traffic diversion in the study area.

**Project Title**: Gerald Desmond Bridge Replacement Project

**Project Location**: Back Channel, Port of Long Beach, Los Angeles County, California

**Project Description**: The proposed project consists of replacement of the aging four-lane Gerald Desmond Bridge with a six-lane bridge that would be a landmark in the Port and City of Long Beach. For further information about the project, see the attached "Additional Project Information."

Your input on the proposed project at this stage in the CEQA process is one of the mechanisms to ensure that the concerns of your agency are brought forth to the Port early in the process. Please send your response as early as possible but ***no later than January 5, 2006***.

In addition, please send your response and the name of a contact person in your agency, as well as any comments or questions regarding the proposed project to Robert Kanter, Ph.D., Port of Long Beach, Planning Division, 925 Harbor Plaza, Long Beach, CA 90802

Robert Kanter

Robert Kanter, Ph.D.
Director of Planning and
Environmental Affairs

SEC:s

Attachments

# Additional Project Information

## Purpose and Need of Project

The purpose of the proposed project is to replace the aging 156-foot vertical clearance, four-lane Gerald Desmond Bridge, constructed in 1968 with a higher six-lane bridge that would be an engineering landmark within the Port and the City of Long Beach. The new cable-stayed bridge would have two additional lanes and a 200-foot vertical clearance over the Back Channel. It has a planned 100-year design life. In addition, it would enable the Port to remove the existing, physically deteriorated structure from service, accommodate projected increases in vehicular traffic on the bridge, and allow for the increased size in container ships in the future. The new bridge with a higher vertical clearance would meet maritime demand by accommodating larger ships.

The Gerald Desmond Bridge is one of only three bridges that provide access to Terminal Island. The current structure has a steel superstructure (truss and girder) that supports a reinforced concrete deck, all supported by reinforced concrete substructures. In 1997, the structure underwent seismic retrofit and fatigue retrofit; it continues to deteriorate.

## Alternatives Evaluated

There are two build alternatives being considered for the project: 1) a new bridge on the north side of the current structure with a 200-foot vertical clearance over the Back Channel, called the North-side Alignment Alternative and 2) a Toll-Operation Alternative (same footprint as the North-side Alignment Alternative) with two scenarios. One scenario is part of a study for a tolling district for all three bridges on Terminal Island; Gerald Desmond, Vincent Thomas, and Schuyler Heim. The other is a stand alone toll facility on the Gerald Desmond Bridge. An alternative to locate the new bridge on the south side of the existing bridge was evaluated in the June 2004 draft EIR/EA and found to be non-viable primarily due to unacceptable impacts on the Port's new Pier T container terminal south of Ocean Boulevard. An option to upgrade rather than replace the existing structure was also considered; this was not a viable alternative, as the bridge would be closed for an extended period of time causing major diversion of traffic to local arterials and severely impacting those facilities. The viability of constructing a tunnel to replace the bridge was considered, but it was found to be infeasible due to the high costs and the challenges associated with its constructability. Finally, different types of bridge design options were analyzed, which included Single Mast Tower, H-Tower with Vertical Legs, H-Tower with Slanted Legs, and Delta Tower.

## Environmental Setting

The Gerald Desmond Bridge is located in an industrialized area in the Port. The area is highly disturbed and includes land uses such as lumber terminals, a liquid bulk terminal, a scrap metal terminal, a container terminal, and oil production facilities.

## Methodology

The technical studies to support the revised draft EIR/EA are being prepared in accordance with various Port Protocols and other applicable laws and procedures, and they are outlined in the following table

# METHODOLOGIES

| Technical Study | Port Guidance Procedural Guide | Applicable Laws, Procedures, and Agencies |
|---|---|---|
| Air Quality Technical Study | Environmental Protocol Environmental Impact Report Standards and Practices, 2005. | UC Davis Transportation Project-Level Carbon Monoxide Protocol, Revised December 1997<br><br>FHWA Guidance for Qualitative Project Level "Hot Spot" Analysis in PM-10 Nonattainment and Maintenance Areas, September 2001 |
| Energy Technical Study | Environmental Protocol Environmental Impact Report Standards and Practices, 2005. | California Energy Commission On-road & Rail Transportation Energy Demand Forecasts for California, April 1999 |
| Geologic Resources Technical Study | Environmental Protocol Environmental Impact Report Standards and Practices, 2005. | State Mining and Geology Board Guidelines for Evaluating and Mitigating Seismic Hazards in California Special Publication 117, 1997 |
| Historic Properties Survey Report | Environmental Protocol Environmental Impact Report Standards and Practices, 2005.<br><br>City of Long Beach Green Building Policy for Municipal Buildings, 2003.<br><br>City of Long Beach Municipal Code Public Facilities and Historical Landmarks (Chapter 16.04), 1982. | US Department of the Interior National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation, 1995.<br><br>Caltrans Environmental Handbook Volume 2: Cultural Resources, January 2004. |
| Initial Site Assessment | N/A | California Department of Toxic Substance Control (DTSC), 2005.<br><br>National Council for Science and the Environment (NCSE), 2005.<br><br>Summaries of Environmental Laws Administered by the EPA, 2005.<br><br>ASTM E1527-00, Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process, 2005. |
| Land Use Technical Study | Environmental Protocol Environmental Impact Report Standards and Practices, 2005.<br><br>Port of Long Beach Master Plan, 1999. | Caltrans Environmental Handbook Volume 4: Community Impact Assessment, June 1997. |
| Natural Environment Study | Environmental Protocol Environmental Impact Report Standards and Practices, 2005.<br><br>Ports of Long Beach and Los Angeles Year 2000 Biological Study of San Pedro Bay, 2002. | Caltrans Environmental Handbook Volume 3: Biological Resources, January 2000. |
| Noise Technical Study | Environmental Protocol Environmental Impact Report Standards and Practices, 2005.<br><br>City of Long Beach Municipal Code Noise (Chapter 8.80), 1982 | Caltrans Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, October 1998. |
| Socioeconomic Study | Environmental Protocol Environmental Impact Report Standards and Practices, 2005.<br><br>A White Paper on Environmental Justice: Opportunities in Port of | Caltrans Environmental Handbook Volume 4: Community Impact Assessment, June 1997.<br><br>Environmental Justice Executive Order 12898, 1994. |

| Technical Study | Port Guidance Procedural Guide | Applicable Laws, Procedures, and Agencies |
|---|---|---|
| | Long Beach Projects, 2005. | |
| Traffic Analysis Report | Environmental Protocol Environmental Impact Report Standards and Practices, 2005. Port Terminal Throughput Final White Paper, 2005. | Highway Capacity Manual (HCM 2000) prepared by the Transportation Research Board (TRB) Committee. |
| Utilities Study | Environmental Protocol Environmental Impact Report Standards and Practices, 2005.<br><br>Utility and Service Systems, 2005. | N/A |
| Water Resources | Environmental Protocol Environmental Impact Report Standards and Practices, 2005.<br><br>City of Long Beach Municipal Code NPDES & SUSMP Regulations (Chapter 18.95), 1982. | Caltrans Storm Water Quality Handbook, Construction Site Best Management Practices (BMPs) Manual, September 2002.<br><br>Caltrans Statewide Storm Water Management Plan, May 2003. |
| Visual Impact Assessment | Environmental Protocol Environmental Impact Report Standards and Practices, 2005. | FHWA Visual Assessment for Highway Projects, March 1981. |

Figure - Vicinity and Study Area Map