

Al Larson Boat Shop Improvement Project

Draft Environmental Impact Report Reader's Guide



January 2012

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AL LARSON BOAT SHOP IMPROVEMENT PROJECT ENVIRONMENTAL REVIEW PROCESS SUMMARY

January 2012

Release of the Draft Environmental Impact Report

The Los Angeles Harbor Department (LAHD) has released the Draft Environmental Impact Report (Draft EIR) for the Al Larson Boat Shop (ALBS) Improvements Project (“proposed Project”). The purpose of this document is to inform the public of the proposed Project, alternatives considered, any potential environmental effects, key community concerns, and the environmental review process. While this document summarizes the Draft EIR, is not an official part of the Draft EIR, which was prepared to comply with the California Environmental Quality Act (CEQA) requirements.



View of existing Al Larson Boat Shop looking west from Fish Harbor.

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Project Purpose and Objectives

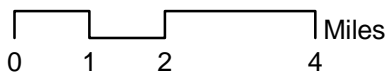
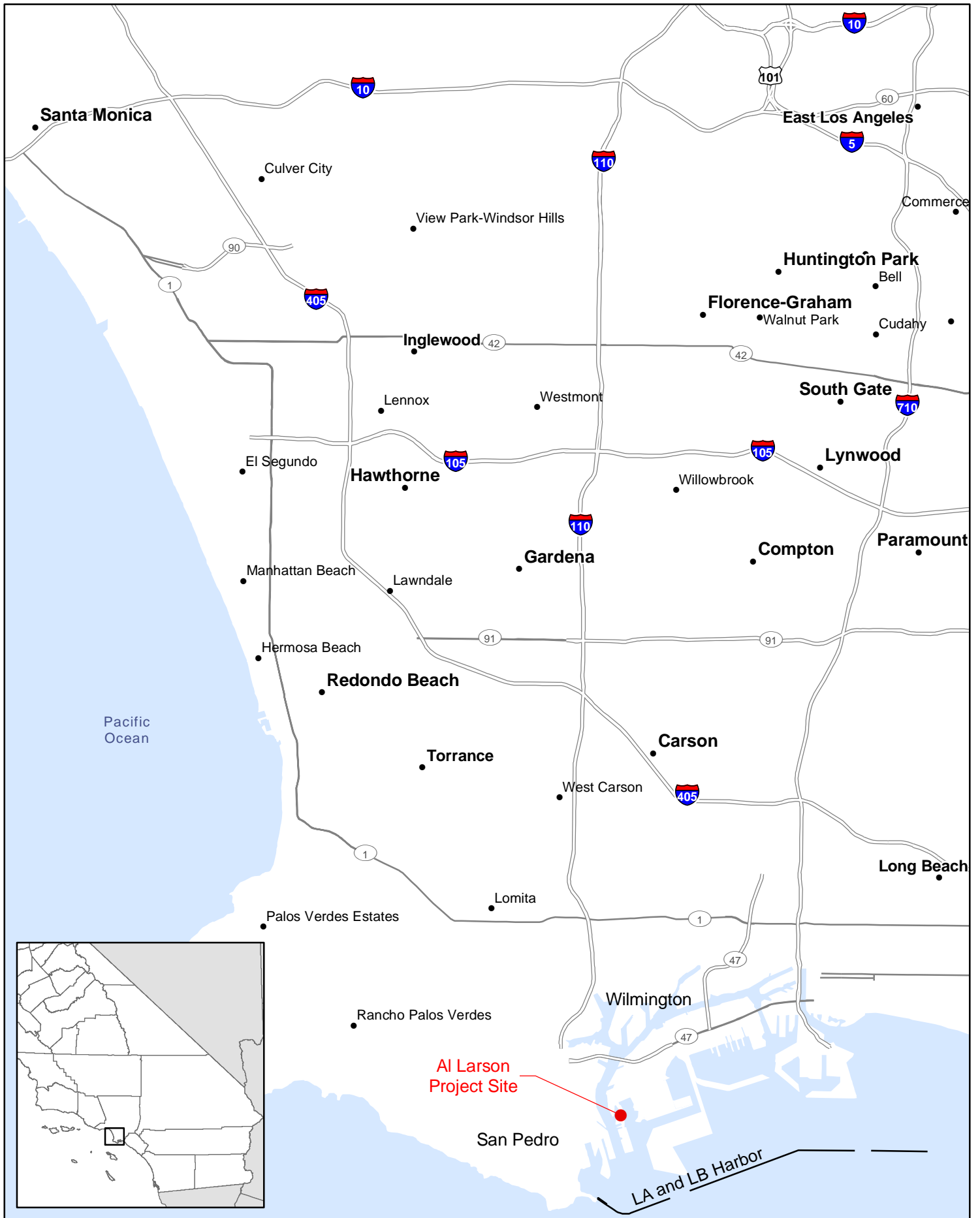
The basic purpose of the proposed Project is to improve the safety and efficiency of marine ship building, expand the maintenance and repair capabilities of the operation, modernize the site in order to comply with existing and future water quality regulations, update the ALBS facilities National Pollutant Discharge Elimination System (NPDES) permit and Waste Discharge Requirements (WDR), and removal of legacy landside contaminated soils for disposal off-site and legacy contaminated bottom sediment in Fish Harbor for use in the Confined Disposal Facilities (CDFs).

The objectives of the proposed Project are as follows:

- Place ALBS in compliance with its WDR and NPDES requirements by re-contouring the site, removing three existing marine railways and constructing a storm water collection and treatment system.
- Demolish existing wharfs, piers and buildings/structures to allow for the subsequent creation of two CDF cells in their place to sequester contaminated sediment.
- Dredge sediment to accommodate deeper draft vessels, remove contaminated sediment to improve water quality, and promote regional sediment management objectives by beneficially reusing dredged material to create two CDFs.
- Remove buildings/structures in order to modernize and reconfigure the facility, to optimize and expand the existing boat shop operation at the present location and continue to meet a regional need for marine vessel repair.
- Replace aging infrastructure and construct a new building to support improved operations.
- Clean-up site legacy contaminants from the historical use of the site as a boat shop, including contaminants located beneath existing pavement and buildings.
- Enter a 30-year lease renewal between ALBS and LAHD changing the facility's leasehold from 7.7 acres (2.35 acres of land and 5.35 acres of water) to 7.3 acres (4.1 acres of land and 3.2 acres of water).

Project Location

The ALBS facility is located at 1046 Seaside Avenue, and the boat shop occupies Berth 258 at the entrance to Fish Harbor (see Figure 1). The ExxonMobil terminal and Southern California Ship Services are to the northwest, fisheries and canning facilities are to the north (across Fish Harbor) with the ExxonMobil/General Petroleum facility (a fuel depot) along the northern Project site boundary, Fish Harbor is to the east, the Southwest Marine Administration Building and former Southwest Marine Shipyard site are to the west, and a boat marina (Al Larson Marina) and Reservation Point/Coast Guard Station Los Angeles /Federal Prison are to the south.



Proposed Project

In June 2008, ALBS submitted an application to the LAHD (through LAHD's Application for Discretionary Project process) for a 30-year lease renewal and a Coastal Development Permit to modernize and upgrade their existing boat shop. The proposed Project represents the first major upgrade to the facility since 1924. The proposed Project would redevelop the existing ALBS to modernize the facility, comply with the National Pollutant Discharge Elimination System (NPDES) permit and Water Discharge Requirement (WDR), and to improve its ability to repair ships and vessels. Improvements would include replacing obsolete facilities with new facilities, improving site hydrology to address NPDES stormwater requirements, maintenance dredging to ensure adequate vessel access to the site, and constructing two CDFs over two phases of the Project. A CDF is an engineered landfill designed to safely sequester sediment that has been deemed unsuitable for open water disposal such that the contaminated material is not in contact with the surrounding water. The proposed Project's CDFs would beneficially reuse contaminated dredge materials and result in approximately 0.9 acre of new land for increased vessel maintenance and repair, including use of the area by the proposed 600- and 100-ton boat hoists. Creation of this new land area would require an amendment to change the land use of this acreage from water to Maritime Support in the Port's Master Plan.

Key Definitions

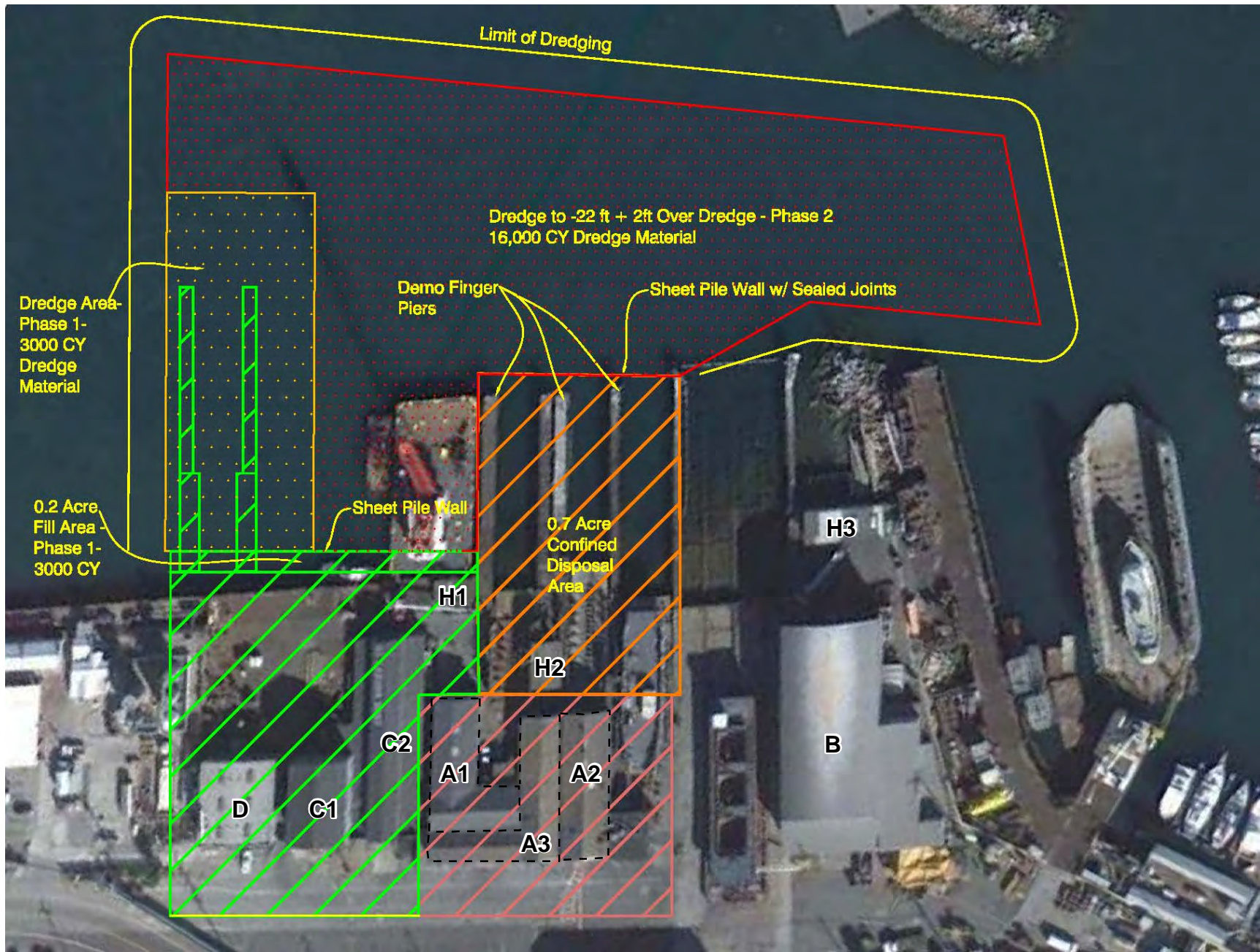
CDF = an engineered landfill designed to safely sequester sediment not eligible for open water disposal such that the contaminated material is not in contact with the surrounding water.

Construction would include demolishing and reconstructing a number of existing buildings, maintenance dredging to a depth of -22 feet MLLW plus an additional -2 feet overdredge¹ (for a total of approximately 19,000 cubic yards [cy] of sediment), creation of the CDFs containing cement-stabilized dredged materials, and installing new equipment (i.e., 600- and 100-ton boat hoists). In addition, the proposed Project would remove historical sediment and soil contamination.

The proposed Project would also require a permit from the U.S. Army Corps of Engineers (USACE) to demolish the existing wharfs, perform maintenance dredging, construct the two new piers (for use of the boat hoists), and to construct the CDFs. The USACE is conducting a separate analysis under the National Environmental Policy Act (NEPA) separately from this CEQA analysis. The USACE has made a preliminary determination that an Environmental Impact Statement is not required for the proposed work and is currently in the process of completing an Environmental Assessment for the proposed Project. A Public Notice was circulated by the USACE in conjunction with the application for the dredge permit from October 9, 2009 through November 9, 2009.

To minimize operational impacts to the facility during construction, the proposed Project would be constructed in three phases (Figure 2). The basic elements of the three phases are as follows, along with a description of the phasing:

¹ Overdredge refers to the amount of dredging that is allowed over what is stated in the dredging permit. Dredging is somewhat imprecise, and as a result, a certain amount of overdredge is allowed under the USACE Dredge Permit.



- A - Office and Workshop Complex
- B - Paint and Shed
- C - Machine Shop Complex
- D - Building No. 4
- H - Ancillary Buildings and Structures

LEGEND:

-  PHASE 1
-  PHASE 2
-  PHASE 3



Port of Los Angeles
 Al Larson Boat Shop
 Improvement Project
 Project Site Plan
 Figure 2

Phase 1

- Demolish the existing 200-foot creosote-treated timber wharf and piles within the Phase 1 footprint.
- Demolish Buildings D, C1, and structure H1 in the Phase 1 footprint.
- Construct a sealed steel sheet pile bulkhead to form the perimeter of the CDF cell.
- Dredge approximately 3,000 cy within the Phase 1 footprint to a depth of -22 feet MLLW, plus an additional 2-foot overdredge allowance. The dredged material would be treated and placed in the CDF cell.
- Install two concrete finger piers supported by 62 (24-inch) octagonal concrete piles for each pier (126 total) to support new 600- and 100-ton boat hoists.
- Install new 600- and 100-ton boat hoists on the new piers along the north end of the Project site.
- Install facilities consistent with the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements, including new storm drain system within the Phase 1 footprint and the installation of an oil/water separator.
- Construct a raised curb/step around Buildings C2 and A1.
- Remove pavement, excavate (from open area and building footprints) and export for disposal approximately 2,000 cy of contaminated landside contaminated soil from Phase 1 area followed by import of approximately 2,000 cy of clean soil to approximately the same elevation of the Phase 1 CDF (12 feet MLLW).
- Grading, high-strength paving, and lighting improvements within the Phase 1 footprint.

Phase 2

- Removal of the piers associated with the existing marine railways for the existing boat hoist (the rails associated with the existing lift system would remain because this area would be contained within the second CDF).
- Demolish structure H2.
- Construction of a second sealed sheet pile bulkhead for the second CDF.
- Dredge approximately 16,000 cy of material to -22 feet MLLW (plus an additional 2-foot overdredge allowance) to provide navigation for the upgraded facilities. The dredged material would be treated and placed in the CDF cell.
- Excavate approximately 2,800 cy of contaminated landside soil for disposal followed by import of approximately 2,800 cy of clean material to bring the upland area to approximately the same elevation as the Phase 2 CDF (approximately 12 feet MLLW).
- Install facilities consistent with the SUSMP provisions, including new storm drain system within the Phase 2 footprint that directs storm water to the oil/water separator installed in Phase 1.
- Grading, high strength pavement, and lighting improvements within the Phase 2 footprint.

Phase 3

- Demolish Buildings A2 and A3, landside of the Phase 2 CDF.
- Remove asphalt, excavate approximately 2,800 cy of contaminated landside soil from the Phase 3 footprint area, including from the footprints of the demolished buildings, export the contaminated soil for disposal and import of approximately 2,800 cy of clean fill.
- Implement landside improvements including grading, paving, existing utility protection, electrical relocations, yard lighting, shop air and installation of new storm drain system.
- Construct a new 2,400 square foot, two-story office building on the reconfigured site to replace Buildings A2, A3, C1, and D that were demolished in Phases 1 and 2.

What is CEQA?

CEQA was enacted by the state legislature in 1970 and was patterned after NEPA. CEQA requires public agency decision makers to document and consider the environmental implications of their actions. CEQA applies to all government agencies at all levels in California, including local agencies, regional agencies, and state agencies, boards and commissions.

The LAHD is the state lead agency responsible for preparation of the EIR and the ALBS is the project applicant for the proposed Project. LAHD has determined that there is the potential for significant environmental impacts and; therefore, an EIR has been prepared. Several other agencies have special roles with respect to the proposed Project and will use this EIR as the basis for their decisions to issue any approvals and/or permits that might be required. This environmental review process includes the preparation of the following documents:

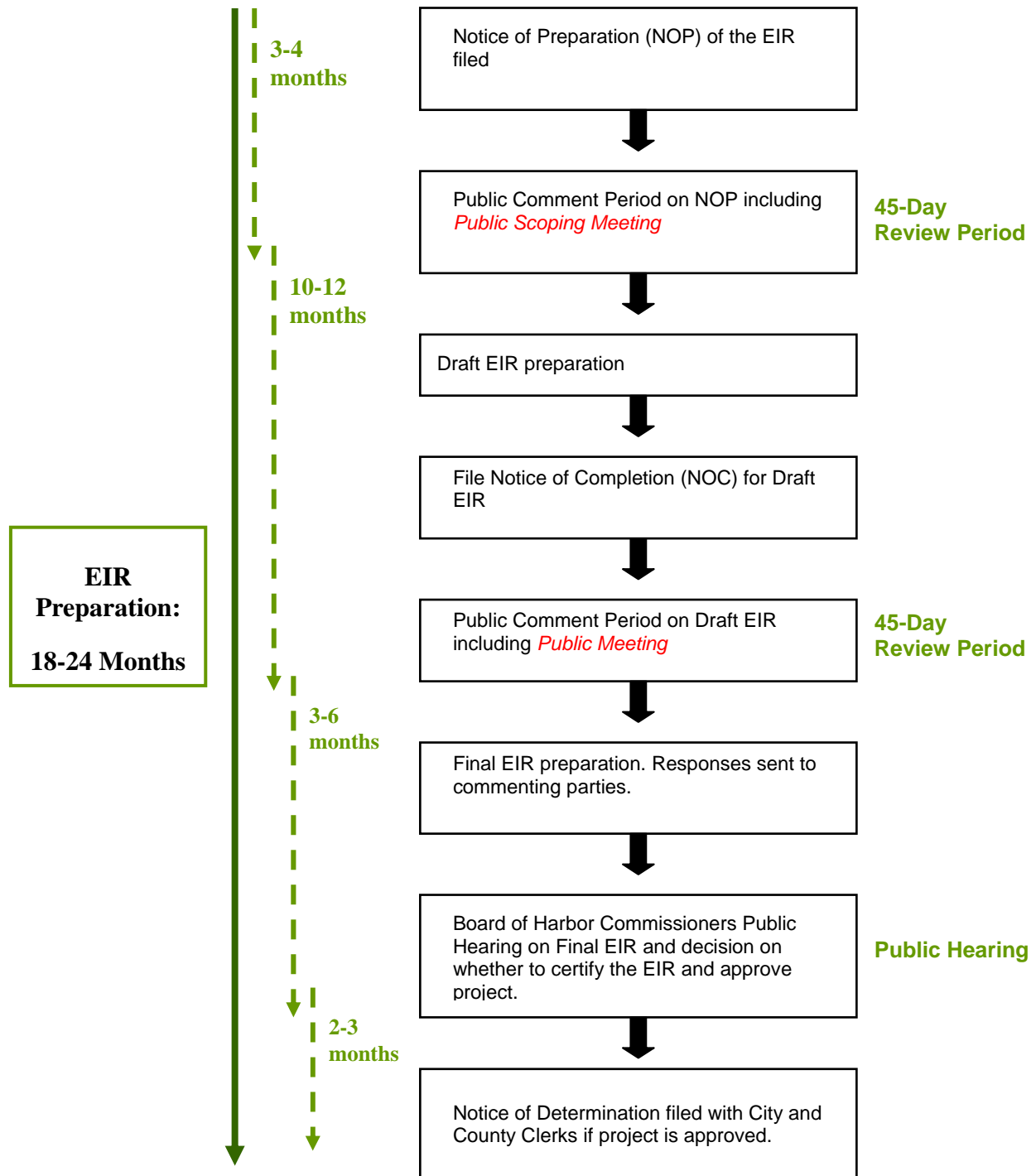
- An **Initial Study**, which is a preliminary analysis prepared by the CEQA lead agency to determine whether an EIR or Negative Declaration must be prepared and, if necessary, identify the significant environmental effects to be analyzed in an EIR.
- A **Notice of Preparation (NOP)**, which is a brief notice sent to interested parties requesting input on establishing the scope (environmental issues addressed) of an environmental document. It is the first step in the EIR process.
- A **Draft EIR**, which fully analyzes the proposed Project, project alternatives, and environmental impacts. The Draft EIR also discusses all feasible measures to mitigate the environmental impacts. Upon completion, the Draft EIR is made available for public review.
- A **Final EIR** is prepared after comments on the draft are received and reviewed. The Final EIR must contain the lead agency's response to all comments reviewed and must discuss any opposing views on the issues raised.

Key Definitions

Lead Agency = The Public Agency that has the primary responsibility for carrying out or approving a project that may have a significant effect on the environment.

More details on the EIR process are provided in Figure 3.

Figure 3: EIR Process



During the Draft EIR, the Port will gather comments from the public and other agencies about the analysis and content of environmental impacts as a result of the construction and operating of the proposed project.

The Draft EIR will undergo a 45-day comment period from January 20, 2012 through March 5, 2012. During this time, the LAHD will accept written comments and will host a public meeting on February 15, 2012 to present its findings and provide opportunity for public comment. The public meeting will be held at 6:00 p.m. in the Board Room of the Harbor Administration Building, 425 S. Palos Verdes Street, San Pedro CA 90731. All comments will be responded to in the Final EIR.

The public may request a free electronic copy or hard copy version (for a fee) of the Draft EIR by calling Dennis Hagner at (310) 732-3682.

A copy of the Draft EIR may also be downloaded at www.portoflosangeles.org or hard copies may be viewed at the following locations:

- L.A. Public Library, Central Branch, 630 West 5th Street, Los Angeles California;
- L.A. Public Library, San Pedro Branch, 931 South Gaffey Street, San Pedro, California;
- L.A. Public Library, Wilmington Branch, 1300 North Avalon, Wilmington, California; or
- LAHD, 222 W. 6th Street, 10th Floor, Suite 1080, San Pedro, California.

How are Impacts Determined?

The purpose of the environmental review process is to:

- Inform government officials and the public of the environmental impacts of a proposed project
- Identify impacts of a proposed project on the environment
- Review a range of reasonable alternatives that would avoid or lessen any significant environmental impacts
- Indicate ways to avoid or mitigate, if possible, significant impacts

In instances where significant impacts cannot be avoided or mitigated to less than significant levels, the project could still be approved if there are economic, legal, social, technological, or other benefits that outweigh unavoidable significant environmental effects (referred to as overriding considerations).

In EIRs, environmental impacts are determined in a step-wise process:

1. Analyze the environmental conditions when the analysis began (called baseline conditions). Normally, baseline conditions are the physical environmental conditions in the vicinity of a project that exist at the time of the NOP is provided to the public. The NOP for the proposed Project was released in September 29, 2010.
2. Analyze the environmental conditions over the life of a proposed Project. The proposed Project operates at full buildout and optimal capacity by 2014.

Key Definitions

Statement of Overriding Considerations = A statement that specifies specific reasons why the Lead Agency found that the project's benefits outweigh its unavoidable adverse impacts.

3. Compare baseline and project conditions. The difference between baseline and project conditions (the delta) is compared to thresholds. The LAHD uses a threshold guideline established by the City of Los Angeles (the City of Los Angeles CEQA guidelines, which include the South Coast Air Quality Management District's (SCAQMD) air emissions thresholds).
4. If the difference between the project and baseline conditions exceeds the threshold, the impact is considered **significant**. If the delta does not exceed the threshold, the impact is considered **less than significant**.

If the analysis finds that there are significant impacts, feasible mitigation measures, if available, are applied to reduce the impacts. If mitigation is not able to reduce impacts below the threshold, the impacts are defined as **significant and unavoidable**. The following is a summary of the environmental resources that were analyzed and the environmental impacts that would be created by the construction and operation of the proposed Project.

Summary of Proposed Project Impacts Analyzed in the Draft EIR

Unavoidable Significant Impacts

- Air Quality, Meteorology, and Greenhouse Gases
- Cultural Resources (construction)
- Noise (construction)

Less-than-Significant Impacts after Mitigation

- Biological Resources

Less-than-Significant Impacts

- Aesthetics and Visual Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Recreation
- Public Services and Utilities
- Traffic and Transportation
- Water Quality, Sediments and Oceanography

Project Mitigation Measures

The following mitigation measures form the foundation of a mitigation monitoring and reporting program (MMRP) for the proposed Project. CEQA requires public agencies to adopt a reporting or monitoring program for the changes to the project that have been adopted to mitigate or avoid significant effects on the environment (Public Resources Code Section 21081.6). The program must be adopted by the public agency at the time findings are made regarding the project. These mitigation measures described are supplemental to those required as standard procedure for the Port and its contractors. The mitigation measures (MM) by resource area are as follows (*For more details on Mitigation Measures see each individual resource in Chapter 3 of the Draft EIR*):

Air Quality, Meteorology, and Greenhouse Gases

- **MM AQ-1:** Harbor Craft Used during Construction
- **MM AQ-2:** On-Road Trucks
- **MM AQ-3:** Construction Equipment
- **MM AQ-4:** Best Management Practices
- **MM AQ-5:** Additional Fugitive Dust Controls
- **MM AQ-6:** General Mitigation Measure
- **MM AQ-7:** Compact Fluorescent Light Bulbs
- **MM AQ-8:** Energy Audit
- **MM AQ-9:** Recycling.
- **MM AQ-10:** Tree Planting.

Biological Resources

- **MM BIO-1:** Apply Habitat Mitigation Credits

Cultural Resources

- **MM CUL-1:** Archaeological and Ethnographic Resources
- **MM CUL-2:** Historic Resource Recordation
- **MM CUL-3:** Recordation Posting

Noise

- **MM NOI-1:** Noise Reduction during Pile Driving
- **MM NOI-2:** Erect Temporary Noise Attenuation Barriers Adjacent to Pile Driving Equipment, Where Necessary and Feasible
- **MM NOI-3:** Temporary Noise Attenuation Barriers

Alternatives Considered

As required under CEQA, this Draft EIR evaluates a reasonable range of alternatives to the proposed Project. The identification by the LAHD of a reasonable range of alternatives is informed by the legal mandates of the lead agency. The LAHD operates the Port of Los Angeles (Port) under the legal mandates of the Port of Los Angeles Tidelands Trust (Los Angeles City Charter, Article VI, Section 601; California Tidelands Trust Act of 1911) and the California Coastal Act (PRC Division 20 Section 30700 et seq.), which identify the Port and its facilities as a primary economic and coastal resource of the State of California and an essential element of the national maritime industry for promotion of commerce, navigation, fisheries, and Harbor operations. Activities should be water dependent and the LAHD must give highest priority to navigation, shipping, and necessary support and access facilities to accommodate the demands of foreign and domestic waterborne commerce. The LAHD is chartered to develop and operate the Port to benefit maritime uses, and it functions as a landlord by leasing Port properties to more than 300 tenants.

A total of seven alternatives were considered during preparation of the Draft EIR, which included reduced impacts on potentially historic structures, alternative uses, and alternative locations for the ALBS. A detailed analysis of the potential impacts was performed for each of these alternatives in addition to the proposed Project. *The results of these analyses are presented in Chapter 6 of the Draft EIR.* Table 1 provides a summary of the proposed Project elements associated with each of the alternatives considered for this project.

Alternatives Analyzed in this Draft EIR

The seven alternatives to the proposed Project that are considered in this Draft EIR are:

- Alternative 1 – Reduced Project: Water Quality Improvements
- Alternative 2 – Reduced Project: Limited Demolition
- Alternative 3 – Retention of Historic Buildings
- Alternative 4 – Relocation of Historic Buildings
- Alternative 5 – Alternate Site
- Alternative 6 – No Project
- Alternative 7 – No Federal Action

Alternative 1 – Reduced Project: Water Quality Improvements

Under this alternative, ALBS would not implement any of the proposed improvements on the site. However, in order to comply with the Los Angeles Regional Water Quality Control Board (RWQCB) requirements and remain in operation, they would implement measures on the site to redirect water away from Fish Harbor. Under this alternative, ALBS would place dikes around existing buildings, dikes along the wharf edges, and/or change the slope of the site so that stormwater runoff would drain away from Fish Harbor into an oil/water separator before discharge. Under this alternative, ALBS would continue to operate on the site under a new 30-year lease for the new area. The new lease term would begin in 2012.

Alternative 2 – Reduced Project: Limited Demolition

This alternative would be very similar to the proposed Project; however, not all of the three potentially historic buildings (A2, A3, or C1) identified for demolition would be removed. Most of the other Project components would be constructed/implemented (i.e., drainage improvements, soil clean-up, dredging, 100-ton boat hoist, and CDFs). However, due to the retention of some of the potentially historic buildings slated for demolition, some of these components would not be implemented to their fullest extent, or, as is the case with the 600-ton boat hoist, not implemented at all (due to reduced clearance as a result of the retention of buildings). In particular, the clean-up of landside legacy contaminants would not fully occur, as some of the potentially historic buildings would remain (i.e., contaminated soils beneath the buildings and asbestos from the buildings themselves would remain). Further, the maneuverability and versatility of the boat hoists would be limited due to site constraints. No new structures would be constructed on the site, since some of the potentially historic buildings would remain available for reuse. Under this alternative, ALBS would continue to operate on the site under a new 30-year lease for the new area. The new lease term would begin in 2012.

Alternative 3 – Retention of Historic Buildings

This alternative would contain most of the elements of the proposed Project; however, none of the potentially historic buildings (A2, A3, and C1) would be demolished. No new structure would be constructed on the site, since the historic buildings would remain. As compared to the proposed Project, this alternative would reduce the development of the site by not demolishing/relocating any of the potentially historic buildings, which would preclude the use of the 600-ton hoist (which would not be installed). Under this alternative, ALBS would continue to operate on the site under a new 30-year lease for the new area. The new lease term would begin in 2012.

Alternative 4 – Relocation of Historic Buildings

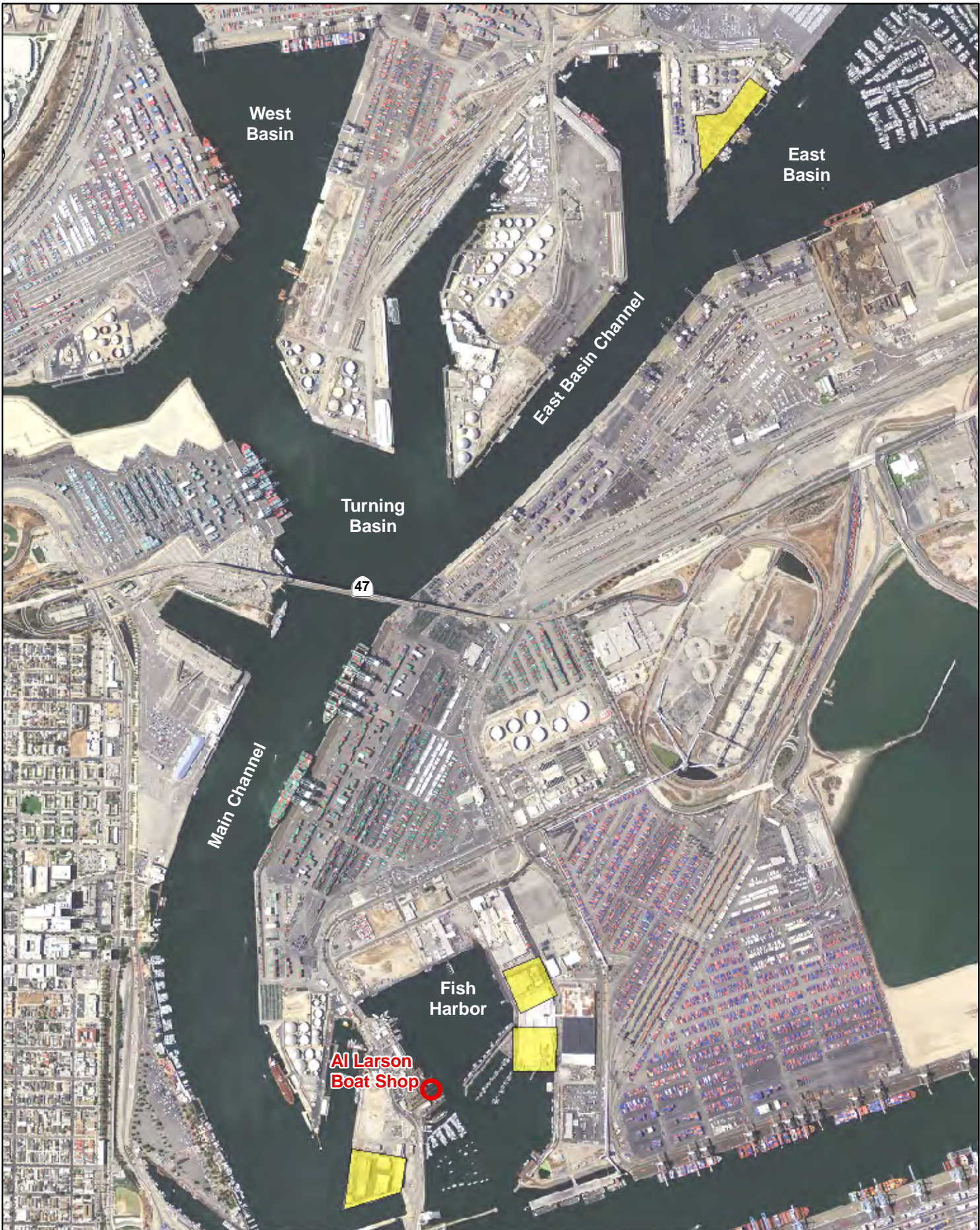
This alternative would be the same as the proposed Project; however, all of the potentially historic buildings would be moved to another location within the Port. The relocation site would be one of two redevelopment project sites within the Port: the San Pedro Waterfront project, or the Wilmington Waterfront project (see Figure 6-2 in Chapter 6, Analysis of Alternatives). Relocation to either of the redevelopment project sites would be consistent with the LAHD's "Procedures to Implement the Real Estate Leasing Policy," which incorporates long-range facility planning and objectives in the two redevelopment project areas. All of the components of the proposed Project would be constructed under this alternative, as all of the historic buildings would be removed from the site. Under this alternative, ALBS would continue to operate on the site under a new 30-year lease for the new area. The new lease term would begin in 2012.

Alternative 5 – Alternate Site

This alternative would involve construction and operation of ALBS at a different location elsewhere within the Port under a new 30-year lease for the alternate site. LAHD has identified four possible alternate sites and each alternate site is similar in size as the existing ALBS site. ALBS would operate on one of the alternate sites at the same level and capacity as the proposed Project. Upon relocating the operation from the Project site, ALBS would be required to clear the site, including contaminated soil and sediment, and return it to its original condition. This site would then be available for use consistent with its zoning as shipbuilding/ship repair facilities, light manufacturing and industrial activities, or ocean resource-oriented industries. For more details on the alternate sites see Figure 4.

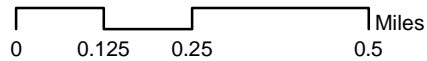
Alternative 6 – No Project

Under CEQA, the Lead Agency is required to evaluate a No Project Alternative that represents what would reasonably be expected to occur in the foreseeable future if the proposed Project were not approved based on current plans and consistent with available infrastructure and community services. Under this alternative, no development would occur on the site and no action would be taken by the tenant to bring the site into compliance with the applicable surface water quality standards. Currently, ALBS has a revocable permit and month to month lease with the LAHD to operate on the site. However, the current configuration of ALBS is not in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater way from Fish Harbor to be in compliance. Because no development would occur on the site, including improvements to the site that would result in water draining away from the Harbor, ALBS would be forced to cease operation. Upon cessation of the existing operation on the site, ALBS would be required to clear the site, including contaminated soil and sediment, and return it to its original condition. This site would then be available for use consistent with its zoning as shipbuilding/ship repair facilities, light manufacturing and industrial activities, or ocean resource-oriented industries.



Legend

Potential Relocation Site



**Port of Los Angeles
Al Larson Boat Shop
Improvement Project
Alternate Locations
Figure 4**

Alternative 7 – No Federal Action

The No Federal Action Alternative represents what would reasonably be expected to occur in the foreseeable future if the USACE Permit was not approved.² Under the No Federal Action Alternative, there would be no maintenance dredging, no CDF construction (no removal of historic sediment and soil contamination), and no construction of the concrete piers for the boat hoist. However, the landside construction could occur and a new lease would be issued to ALBS. Under this alternative, ALBS would continue to operate on the site under a new 30-year lease for the new area. The new lease term would begin in 2012.

Chapter 6 of the Draft EIR contains a more detailed discussion of the Project alternatives and their potential environmental impacts.

² The proposed Project would require a permit from the USACE to perform maintenance dredging and to construct the CDFs.

Table 1: Summary of Project Elements Associated with the Alternatives

Project Element	Alternative 1 – Reduced Project – Water Quality Improvements	Alternative 2 – Reduced Project Limited Demolition	Alternative 3 – Retention of Historic Buildings	Alternative 4 – Relocation of Historic Buildings	Alternative 5 – Alternate Site	Alternative 6 – No Project	Alternative 7 – No Federal Action
Comply with NPDES/WDR	Yes - change site drainage and install oil/ water separator	Yes	Yes	Yes	Yes	No	Yes - change site drainage and install oil/water separator
Dredging contaminated sediment and creation of CDFs	No	Yes	Yes	Yes	Yes (at ALBS site) – but no CDFs would be created.	Yes – but no CDFs would be created.	No
Remove three marine railways and construct concrete piers for new boat hoists	No	Yes - one or more of Buildings A2, A3, or C1 will be retained	Yes - limited use due to turning radius limitations	Yes	Yes - marine railways would be removed at ALBS site. New pier would be constructed at alternate site.	Partial – marine railways would be removed. No new pier would be constructed.	No
Optimize and modernize space through removal of historic buildings	No	Partial - limited use due to turning radius limitations	No	Yes - relocation of 3 historic structures to the San Pedro or Wilmington Waterfront	Yes - relocation of historic buildings to alternate site; removal of buildings (some potentially historic) at the alter. site.	Yes – historic structures would be removed to bring site back to pre-lease conditions	No
Remove landside legacy contamination	No	Partial – no clean up under remaining building(s)	Partial - no clean up under remaining buildings	Yes	Yes - required to bring site back to pre-lease conditions	Yes - required to bring site back to pre-lease conditions	No
Replace infrastructure (lighting, pavement, etc) and construct new office	No	Partial – some new infrastructure but no office building)	No	Partial – some new infrastructure but no office building)	Yes	No	Yes
30-year lease renewal	Yes - but no new area	Yes	Yes	Yes	Yes - but for a different location	No	Yes - but no new area
Return site to pre-lease conditions (nothing on site)	No	No	No	No	Yes	Yes	No

Key Community Issue: Cultural Resources

The proposed Project includes demolition of multiple buildings on the Project site, of which three are eligible for listing in the California Register and may qualify for listing as a City of Los Angeles Historic Cultural Monument (HCM). Two of the structures are located within the Office and Workshop Complex (Buildings A2 and A3). These structures are eligible for listing in the California Register of Historical Resources under Criterion 1, for their contribution to influencing patterns significant in our past. The Office and Workshop Complex is significant for its association with the development of the Los Angeles shipbuilding and fishing industries between 1924 and 1959. Because the building qualifies as a potential historical resource as defined by CEQA and may qualify for listing as a City of Los Angeles HCM, its demolition would represent a significant impact to a historic resource under CEQA.

In addition to the two buildings within the Office and Workshop Complex, proposed Project construction would also demolish Building C1, which is part of the Machine Shop Complex, which is eligible for listing in the California Register of Historical Resources under Criterion 1, as it is directly associated with events that have made a significant contribution to the broad patterns of California's history (the diesel engine) and cultural heritage (fishing, tugboat, and yachting industries). It is also eligible under Criterion 3, because it embodies the distinctive characteristics of the maritime industrial building type, the mid-twentieth century period, from the late 1930s until the late 1950s, and West Coast region. Because the building qualifies as a potential historical resource as defined by CEQA and may qualify for listing as a City of Los Angeles HCM, its demolition would represent a significant impact to an historic resource under CEQA.

Refer to Figure 5 for a view of the buildings on the site.

Mitigation Measures

The following mitigation measures would reduce archaeological and cultural resources associated with Project construction. Mitigation Measures (**MM CUL-1, MM CUL-2 and MM CUL-3**) would apply to all construction activities (*See Section 3.3.4 .3.1 in Chapter 3.3 for a full analysis on all mitigation measures related to archaeological and cultural resources*). After mitigation, cultural resources impacts from the proposed Project would be reduced. However, they would remain significant and unavoidable.

MM CUL-1: Archaeological and Ethnographic Resources

An archaeological monitor shall be present during all initial grading and excavation activities at the proposed Project site. In the event any cultural resources are encountered during earthmoving activities, the construction contractor shall cease activity in the affected area until the discovery can be evaluated by a qualified archaeologist in accordance with the provisions of CEQA §15064.5. The archaeologist shall complete any requirements for the mitigation of adverse effects on any resources determined to be significant and implement appropriate treatment measures. The treatment plan may include methods for: (1) subsurface testing after demolition of existing buildings, (2) data recovery of archaeological or ethnographic deposits, and (3) post-construction documentation. A detailed historic context that clearly demonstrates the themes under which any identified subsurface deposits would be determined significant would be included in the treatment plan, as well as anticipated artifact types, artifact analysis, report writing, repatriation of human remains and associated grave goods, and curation.

A preconstruction information and safety meeting shall be held to make construction personnel aware of archaeological monitoring procedures and the types of archaeological resources that might be encountered. All construction equipment operators shall attend a pre-construction meeting presented by a professional archaeologist retained by LAHD that shall review types of cultural resources and artifacts that would be considered potentially significant, to ensure operator recognition of these materials during construction.

MM CUL-2: *Historic Resource Recordation*

Impacts resulting from the demolition of Buildings A2, A3, and C1 shall be minimized through archival documentation of both building complexes in as-built and as-found condition. Prior to issuance of demolition permits, the Los Angeles Harbor Department (LAHD) shall ensure that documentation of the buildings proposed for demolition is completed in the form of a Historic American Building Survey (HABS) Level II documentation that shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The documentation shall include large-format photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to Port archives. Archival copies of the documentation shall also be submitted to the Los Angeles Maritime Museum, the Central Branch of the Los Angeles Public Library and the Port archives where it would be available to local researchers.

MM CUL-3: *Recordation Posting*

Impacts related to the loss of Buildings A2, A3, and C1 shall be reduced through the development of a retrospective website detailing the history of the Project site and its historical significance. The information may be incorporated into the existing Los Angeles Harbor District (LAHD) website (Port of Los Angeles Historic Virtual Tour website - http://www.laporthistory.org/level2/archive/archive_frameset.html). The website shall include images and details from the Historic American Building Survey documentation and any collected research pertaining historic resources. The content shall be prepared by a qualified architectural historian or historian who meets the Secretary of Interior's Professional Qualification Standards for the History and/or Architectural History. The information shall be posted within two years of the date of completion of the proposed Project.

LEGEND
 A - Office and Workshop Complex (Built 1924) *
 B - Paint Shed (Built 1938) **
 C - Machine Shop Complex (Built 1938) *
 D - Building No. 4 (circa 1938 - 1947)
 E - Docks, Piers and Walls (circa 1924 - 2008)
 H - Ancillary Buildings and Structures (Post 1965)



* Potentially Historic Buildings.
 ** Not part of the Project.



**Port of Los Angeles
 Al Larson Boat Shop
 Improvement Project**
 Buildings on the Project Site
 Figure 5

Key Community Issue: In-Water Construction - Dredging and CDF Construction

In addition to upland (landside) improvement, the proposed Project would include maintenance dredging, CDF construction, in-water improvements to marine structures (such as piers and bulkheads), and the addition of a new boat lift and pier structure (see Table 2 for in-water activities and construction phasing schedule). Up to 19,000 cubic yards of material would be dredged at Berth 258 along the newly created wharf and up to 1 acre of new land area would result from creation of two CDFs. As a result of the dredging and CDF creation, several of the Project objectives would be met:

- By removing clean and contaminated sediments that have accumulated, the navigable capacity of the ALBS would be restored and larger vessels would be accommodated;
- By beneficially reusing dredged material in CDF cells regional sediment management objectives would be met; and
- New and improved facilities and infrastructure would be constructed on the new land area resulting from CDF creation, which would serve to enhance ALBS operations.

Table 2: In-water Construction Activities and Schedule

Work Activity and Schedule	Phase 1	Phase 2	Phase 3
Schedule	2012	2013	2014
Dredging	Clamshell dredging of approximately 3,000 cubic yards to a depth of -22 feet MLLW plus 2-foot overdredge allowance. Dredged material will be placed in a scow for treatment by cement stabilization prior to placement in the Phase 1 CDF cell.	Dredging of approximately 16,000 cubic yards to a depth of -22 feet MLLW (plus a 2-foot overdredge allowance). Dredged material will be placed in a scow for treatment by cement stabilization prior to placement in the Phase 2 CDF cell.	No in water work is associated with Phase 3.
Demolition	Partial removal of creosote-treated timber wharf (back to the existing seawall). Demolition of some buildings in Phase 1 footprint (Buildings D, and C1, and appurtenant structure H1 – see Figure 2)	Removal of finger piers for the existing boat hoist railway. Demolition of appurtenant structure H2 the in Phase 2 footprint (See Figure 2). Removal of asphalted areas currently being used for dry docking.	Demolition of Buildings A2 and A3 in the Phase 3 footprint landside of Phase 2 CDF (See Figure 2)
Creation of Confined Disposal Facilities (CDFs)	Installation of sealed steel sheet pile bulkhead and creation of 0.2 acres of new fill area for Phase 1 CDF.	Installation of sealed steel sheet pile bulkhead and creation of 0.7 acres for Phase 2 CDF	No CDFs in Phase 3.
Additional In-water Components	Construction of new boat hoist piers	No additional in-water components in Phase 2	No additional in-water components in Phase 3

The USACE is responsible for permitting work and structures in navigable waters, discharges of dredged or fill material in waters of the U.S., and transport and disposal of dredged material at U.S. Environmental Protection Agency (USEPA)-designated sites in ocean waters. It is anticipated a USACE permit pursuant to Section 404 of the Clean Water Act and Section 10 of the River and Harbor Act would be required for the proposed Project. The proposed Project would require a permit from the USACE to perform maintenance dredging and to construct the CDFs. As mentioned under *Proposed Project*, the NEPA analysis is being completed separately from the CEQA analysis; a preliminary determination has been made by the USACE that an Environmental Impact Statement is not required for the proposed work and the USACE is currently in the process of completing an Environmental Assessment for the proposed Project. A Public Notice was circulated by the USACE in conjunction with the application for the dredge permit from October 9, 2009 through November 9, 2009.

Potential Impacts

Dredging

Working from a barge, a clamshell bucket and crane will dredge sediment from the harbor bottom. Dredging is not expected to result in violations of water quality standards based on receiving water monitoring studies of similar dredging projects in the Harbor, which have documented a relatively small, turbid dredge plume that dissolves rapidly with distance from dredging operations. The types of water quality impacts that could occur during dredging and pile driving include short-term increases in suspended sediments and turbidity levels, decreases in dissolved oxygen (DO) concentrations, increases in nutrient concentrations, and increases in dissolved and particulate contaminant concentrations in areas where contaminated sediments would be disturbed. These changes to water quality would be temporary and expected to be confined to the immediate vicinity (e.g., within 300 feet) of in-water construction and dredging activities.

To minimize water quality impacts, BMPs and monitoring would be implemented at the site, including:

- Installing and maintaining a continuous, floating silt curtain that completely encompasses the dredging area; and
- Conducting water quality monitoring during all dredging activities to ensure that applicable turbidity standards are not exceeded.

Dredging may also temporarily remove bottom-dwelling (benthic) organisms from the dredged area, but overall fish and benthic biota at the site are sparse, and communities of organisms would rapidly recolonize after dredging is completed.

Key Definitions

Turbidity = a measure of the degree to which the water loses its transparency due to the presence of suspended particulates. The more total suspended solids in the water, the murkier it seems and the higher the turbidity. This is a good measure for water quality.

Plume = used to describe the area of contamination which is typically shaped like a tear drop. It spreads out from the source.

CDF Construction

The proposed CDFs would result in two significant benefits – providing a disposal location for the contaminated dredge material, and creating additional land area for construction of new facilities. CDFs would be constructed by first installing a sealed steel sheet pile bulkhead around the perimeter of each of the CDF cells to prevent exchange of water from the CDF cell to the marine environment. Before dredged material is placed in the CDF, it would be treated by a process called cement stabilization, or immobilization technology. This process involves stabilization and solidification of the dredged material

with cement-based additives that convert any contaminants in the dredged material into their least soluble, mobile, or toxic forms. The result is a stable material that would be paved over and upon which new facilities would be constructed.

The creation of the CDFs would result in the loss of general marine resources by converting 0.9 acre of open water habitat to land area. Although the areas to be filled have extremely low biological function, the agencies have specified that the loss of waters be mitigated. ALBS would apply Inner Harbor Mitigation Bank credits obtained from the Port to compensate for the loss of open water habitat.

Key Community Issue: Air Quality, Health Risk and Greenhouse Gas

The criteria pollutants of greatest concern in the air quality assessment are ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}). Nitrogen oxides (NO_x) and sulfur oxides (SO_x) are the generic terms for NO₂ and SO₂, respectively because NO₂ and SO₂ are naturally highly reactive and may change composition when exposed to oxygen, other pollutants, and/or sunlight in the atmosphere. These oxides are produced during combustion.

In the baseline year (September 1, 2009 through August 31, 2010), the proposed Project site was used for ship repair and included the following facilities: office and workshop complex, paint shed, wood, welding and machine shops, docks, piers, walls and marine railways, marine, and other ancillary buildings and structures. The air quality analysis included a number of sensitive receptors close to the Project site including residents in Fish Harbor (two liveaboard tenants at the Al Larson Marina), approximately 280 feet to the south of the nearest onshore portion of the Project (Phase 3 area) and 100 feet south of the limits of proposed Project dredging (Phase 2). The nearest shore-bound residents are in San Pedro, roughly one mile west of the site's western boundary.

Key Definitions

PM₁₀: particulate matter of less than 10 micrometers in aerodynamic diameter

PM_{2.5}: particulate matter of less than 2.5 micrometers in aerodynamic diameter

Baseline

The baseline includes emissions from sources that were operating in the baseline year and Table 3 summarizes the peak daily emissions associated with these operations. Baseline peak daily emissions are compared to future Project peak daily emissions to determine significance for the proposed Project. For the proposed Project, peak daily and average daily emissions are not anticipated to differ significantly; therefore average daily emissions are not presented in the EIR.

Table 3: Baseline (September 2009 - August 2010) Peak Daily Operational Emissions

Emission Source	Peak Daily Emissions (lb/day) ^{a,c}					
	VOC	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}
Machine Shops ^d	35	4	17	<1	16	5
Offroad Mobile Equipment	1	4	5	<1	<1	<1
Harbor Craft Transit	6	25	95	<1	4	3
Worker Trips	4	39	4	<1	2	1
Total – Baseline^b	46	71	122	<1	22	9

Notes:

a) Emissions assume maximum theoretical daily equipment activity levels. Such levels would rarely occur during day-to-day ALBS operations.

b) Emissions might not add precisely due to rounding. For more explanation, refer to the discussion in Section 3.2.4.1.

c) The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. d) Machine shops include the Welding Shop, Paint Shop, and Machine Shop.

Construction-Related Emissions

Unmitigated Project

Emissions are assumed to begin in 2012 (start of construction) and last for three years. Table 4 presents the maximum daily criteria pollutant emissions associated with construction of the proposed Project, without mitigation. Maximum emissions for each construction phase were determined by totaling the daily emissions from those construction activities that overlap in the proposed construction schedule.

Table 4: Peak Daily Emissions Associated with Proposed Project Construction Activities – Proposed Project Without Mitigation

Emission Source	Peak Daily Emissions (lb/day) ^c					
	VOC	CO	NO _x	SO _x	PM ₁₀ ^a	PM _{2.5} ^a
Phase 1 Construction						
Marine Construction	19	73	200	<1	2	7
Civil Construction	6	25	57	0	9	3
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 1 – Impact^{b,d}	25	98	257	<1	11	10
Thresholds	75	550	100	150	150	55
Significant?	No	No	Yes	No	No	No
Phase 2 Construction						
Marine Construction	13	49	126	<1	2	5
Civil Construction	74	287	852	1	73	41
Building Demolition	2	12	18	<1	1	1
Peak Daily Phase 2 – Impact^{b,d}	89	349	996	1	75	47
Thresholds	75	550	100	150	150	55
Significant?	Yes	No	Yes	No	No	No
Phase 3 Construction						
Marine Construction	0	0	0	0	0	0
Civil Construction	31	126	303	0	23	15
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 3 – Impact^{b,d}	31	126	303	0	23	15
Thresholds	75	550	100	150	150	55
Significant?	No	No	Yes	No	No	No

Notes:

- Emissions of PM₁₀ and PM_{2.5} assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
- Emissions might not add precisely due to rounding. For more explanation, refer to the discussion in Section 3.2.4.1.
- The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. Future studies might use updated data, assumptions, and emission factors that are not currently available.
- The impact equals total Project construction emissions minus baseline construction emissions (which are zero). Exceedances of the thresholds are indicated in **bold**

The largest contributors to peak daily construction emissions are dredging equipment during Phase 1 and 2 dredging activities and CDF construction, transport of contaminated soils for disposal during Phases 1, 2 and 3, and heavy duty off-road construction equipment used during Phase 3 building construction, earthmoving, and storm water system installation. Grading activities are the main source of fugitive dust during construction. Peak daily emissions (as shown in Table 4) in Phase 1, Phase 2, and Phase 3 would exceed the SCAQMD NO_x threshold and in Phase 2 would exceed the SCAQMD VOC threshold for construction emissions. Emissions of all other criteria pollutants would not exceed SCAQMD thresholds in any phase.

Mitigated Project

The following mitigation measures, as briefly described below, would reduce criteria pollutant emissions associated with Project construction. Mitigation Measures (**MM AQ-1 through MM AQ-6**) would apply to all construction activities (*See Section 3.2.4 in Section 3.2, Air Quality, Meteorology, and Greenhouse Gases, of the Draft EIR, for a full analysis and all mitigation measures related to air quality and greenhouse gas impacts*). These mitigation measures would be implemented by the responsible parties identified in Section 3.2.4.5. After mitigation, construction emissions of NO_x would be lower in Phases 1, 2 and 3. However, they would remain significant and unavoidable. Phase 2 construction emissions of VOCs would be reduced to less than significant.

- **MM AQ-1** *Harbor Craft Used during Construction.* As of January 1, 2011, all harbor craft with USEPA designated Category 1 (C1) or Category 2 (C2) marine engines must utilize a USEPA Tier-3 engine, or cleaner; however, a few expectations may apply to this mitigation.
- **MM AQ-2:** *On-Road Trucks.* Trucks hauling material such as debris or any fill material will be fully covered while operating off Port property, idling will be restricted to a maximum of 5 minutes when not in use and will follow USEPA Standards.
- **MM AQ-3:** *Construction Equipment.* All dredging equipment shall meet at a minimum USEPA Tier 3 standards and construction equipment will incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards.
- **MM AQ-4:** *Best Management Practices.* BMPs will be implemented to reduce air emissions from construction activities.
- **MM AQ-5:** *Additional Fugitive Dust Controls.* The project construction contractor shall reduce fugitive dust emissions by 90 percent from uncontrolled levels.
- **MM AQ-6:** *General Mitigation Measure.* For any of the above mitigation measures (MM AQ-1 through MM AQ-4), if a CARB-certified technology becomes available and is shown to be as good as or better in terms of emissions performance than the existing measure, the technology could replace the existing measure pending approval by the LAHD.

Operational-Related Emissions

Operational emissions are presented below in Table 5 for the unmitigated peak daily criteria pollutant emissions associated with operation of the proposed Project. Emissions were estimated for the first year of proposed Project operations after all construction phases are complete. Comparisons to the baseline emissions are presented to determine significance.

The operational emissions associated with the proposed Project assume the following activity levels:

- The proposed Project will increase the boat repair capacity to a maximum of 304 vessels annually.
- Machine shop operations are assumed to increase in proportion to the increase in vessels repaired.
- Emissions are estimated for the first year of proposed Project operations in 2014 and are based on the maximum capacity of the ALBS to provide a conservative estimate of proposed Project impacts.

Table 5: Peak Daily^a Operational Emissions Without Mitigation – Proposed Project

Emission Source	Peak Daily Emissions (lb/day) ^d					
	VOC	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}
Proposed Project						
Machine Shop Operations	82	9	41	<1	37	11
Offroad Mobile Equipment	2	9	12	<1	1	1
Boat Hoists	<1	1	2	<1	<1	<1
Harbor Craft Transit	10	54	63	<1	1	1
Worker Trips ^b	5	50	5	<1	2	1
Total – Project Year 2014^c	100	123	123	<1	42	14
Impacts						
Baseline Emissions	46	71	122	<1	22	9
Project minus Baseline	54	52	1	<1	20	5
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No

Notes:

- Emissions assume the simultaneous occurrence of maximum theoretical daily equipment activity levels. Such levels would rarely occur during day-to-day ALBS operations.
- Truck and worker commute emissions include transport within the South Coast Air Basin.
- Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section 3.2.4.1.
- The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. Future studies might use updated data, assumptions, and emission factors that are not currently available.

Unmitigated peak daily emissions would not exceed baseline emissions for any criteria pollutants for the proposed Project operations. In addition, the 10 tons per year VOC threshold would not be exceeded, assuming 304 boats serviced per year. However, the proposed Project operations would result in off-site ambient air pollutant concentrations that exceed a SCAQMD threshold of significance for Federal NO₂, peak day and annual PM₁₀, and peak day PM_{2.5}.

Mitigated Project

The main source of NO_x emissions from the ALBS is the air compressors used during spray coating operations. The air compressors must be portable and cannot feasibly be replaced with electric units and no other feasible methods to reduce emissions were identified. As a result, no mitigation measures are proposed to reduce NO₂ emissions.

Health Risk Impacts

Health risk assessments (HRAs) discuss average risks over time from all types of environmental pollution and lifestyle choices. With all this information, how do you know when a risk is serious? Often, HRAs are thought of as cancer studies, but risk can refer to both chronic (ex. heart disease) and acute (ex. asthma) diseases and can be designed to study a range of symptoms/diseases. HRAs are tools used by regulators to predict the risk related to a certain level of exposure and base decisions, often land use planning and consumption advisories, on the estimated risk.

HRAs are not diagnosis studies. An HRA will not determine whether a current health problem or symptom was caused by exposure to a pollutant. Epidemiological studies look at past exposure and try to link that exposure, often in a population, to a disease. HRAs estimate if *current* or *future* exposures will result in health risks to a broad population. HRAs commonly report cancer risk as some additional risk in a large population. For example, risk expressed as 1 in a million means that there is a chance of one in a 1,000,000 people of an event occurring. Regulators set acceptable risk values for toxic air contaminant (TACs). These risk numbers are derived from conservative assumptions meant to protect the most vulnerable of a community's citizens. For example, to estimate a residential receptor's risk from air contaminants, the standard model assumes the resident is exposed to the air contaminants while breathing at the 80th percentile breathing rate for 24 hours a day, 350 days a year, over a 70 year period.

The Port of Los Angeles has adopted the threshold of less than 10 in a million as being an acceptable increased cancer risk level for new projects. HRAs also examine the risks from acute and chronic non-cancer exposure. For acute and chronic non-cancer exposure, we use the reference exposure levels (RELs) developed by the California Office of Environmental Health Hazards Assessments (OEHHA). An REL is the concentration level at or below which no adverse health effects are anticipated for specific exposure duration. A Hazard Index (HI) of 1.0 or less indicated that the exposure would present an acceptable or insignificant health risk (i.e., no adverse health impact).

Baseline

The SCAQMD published the third Multiple Air Toxics Exposure Study (MATES-III) in September 2008. MATES III characterizes the ambient air concentrations and potential human exposures in the South Coast Air Basin (SCAB). MATES-III developed an updated toxics inventory and conducted air dispersion modeling to estimate ambient levels and the potential health risks of air toxics. The SCAQMD determined in the *Multiple Air Toxics Exposure Study III* (MATES III) that about 84 percent of the background airborne cancer risk in the SCAB is due to diesel exhaust. The highest modeled air toxics risk was near the ports.

Unmitigated Project

Diesel particulate matter (DPM) is the main contributor to cancer and chronic health risk in the proposed Project. The main sources of DPM would occur during proposed Project construction from heavy-duty off-road construction equipment. During construction, the acute risk associated with residential receptors and occupational receptors would exceed the SCAQMD significance criterion hazard index of 1.0. In addition, cancer risk associated with residential receptors would exceed the SCAQMD significance criterion. Table 6 presents the maximum predicted health impacts associated with the proposed Project construction without mitigation.

Increased toxic air contaminant (TAC) emissions would occur from the increase in ship repair activity anticipated after completion of the proposed Project but are not anticipated to contribute significantly to proposed Project health risk impacts. The TAC emissions associated with operations passed a screening assessment for both short and long-term health risks, and thus, no significant health risks associated with operations would occur.

Mitigated Project

The mitigated proposed Project HRA (associated with construction) is shown in Table 7. The air quality Mitigation Measures listed in the Draft EIR for construction (**MM AQ-1 through MM AQ-6**) would reduce the residential cancer risk and the occupational and residential acute hazard indexes; however, the impacts during construction would remain significant after mitigation. Figure 6 shows a map depicting the maximum concentration locations associated with the proposed Project with the mitigated proposed Project. *Please refer to Appendix C3, Health Risk Assessment, of the Draft EIR for a more detailed discussion.*

Key Definitions

Diesel particulate matter (DPM) = is one of the components of ambient PM₁₀ and PM_{2.5}. Approximately nine percent of Project-related emissions consist of DPM.

Table 6: Maximum Health Impacts Associated With the Construction of the Proposed Project Without Mitigation, 2011 - 2080

Health Impact	Receptor Type	Maximum Predicted Impact ^{a,b}	Significance Threshold
		Increment ^c	
Cancer Risk	Residential ^d	29 x 10⁻⁰⁶ (29 in a million)	10 x 10 ⁻⁶ 10 in a million
	Occupational	9 x 10 ⁻⁰⁶ (9 in a million)	
	Sensitive	5 x 10 ⁻⁰⁷ (0.5 in a million)	
	Student	3 x 10 ⁻⁰⁹ (0.003 in a million)	
	Recreational	3 x 10 ⁻⁰⁷ (0.3 in a million)	
Chronic Hazard Index	Residential	0.03	1.0
	Occupational	0.03	
	Sensitive	0.0004	
	Student	0.00001	
	Recreational	0.0002	
Acute Hazard Index	Residential	3.5	1.0
	Occupational	4.2	
	Sensitive	0.4	
	Student	0.03	
	Recreational	0.2	

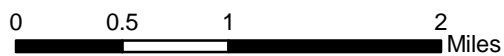
- a) Exceedances of the significance criteria are in **bold**. The significance thresholds apply to the increments only.
- b) Data represent the receptor locations with the maximum impacts or increments. The impacts or increments at all other receptors would be less than these values.
- c) The increment represents Project minus baseline.
- d) The cancer risk values reported in this table for the residential receptor are based on the 80th percentile breathing rate.

Table 7: Maximum Health Impacts Associated With the Construction of the Proposed Project With Mitigation, 2011 – 2080

Health Impact	Receptor Type	Maximum Predicted Impact ^{a,b}	Significance Threshold
		Increment ^c	
Cancer Risk	Residential ^d	2×10^{-05} (22 in a million)	10×10^{-6} 10 in a million
	Occupational	7×10^{-06} (7 in a million)	
	Sensitive	4×10^{-07} (0.4 in a million)	
	Student	3×10^{-09} (0.003 in a million)	
	Recreational	2×10^{-07} (0.2 in a million)	
	Residential	0.008	1.0
	Occupational	0.02	
	Sensitive	0.0002	
	Student	0.00001	
	Recreational	0.0001	
Acute Hazard Index	Residential	1.0	1.0
	Occupational	2.0	
	Sensitive	0.2	
	Student	0.01	
	Recreational	0.1	

Notes:

- Exceedances of the significance criteria are in **bold**. The significance thresholds apply to the increments only.
- Data represent the receptor locations with the maximum impacts or increments. The impacts or increments at all other receptors would be less than these values.
- The increment represents Project minus baseline.
- The cancer risk values reported in this table for the residential receptor are based on the 80th percentile breathing rate.



Port of Los Angeles
Al Larson Boat Shop Improvement Project
Maximum Concentration Locations
Associated with the Mitigated Proposed Project

Figure 6

Greenhouse Gas Emissions

The air quality analysis for the proposed Project includes estimates of greenhouse gas (GHG) emissions during construction and during operations. The construction sources for which GHG emissions were calculated include off-road construction equipment, on-road trucks, dredging equipment, and worker commute vehicles. The operations emission sources for which GHG emissions were calculated include machine shop operations, building operations, off-road equipment, and worker trips to the site. Table 8 and Table 9 presents an estimate of the GHG emissions generated within California borders from the proposed Project construction and operations.³ Construction and operational GHG emissions would exceed the baseline; therefore, emissions of the Project-related to GHGs would be significant. The following list of mitigation measures would reduce operational GHG emissions along with a list of reduction strategies found in Section 3.2.4.3 of the Draft EIR. *Please refer to Section 3.2.4.3 in Section 3.2, Air Quality, Meteorology, and Greenhouse Gases, of the Draft EIR, for a more detailed discussion of the GHG impact analysis.*

Table 8: Total GHG Emissions from Al Larson Boat Shop Construction Activities – Proposed Project

Emission Source	CO ₂	CH ₄	N ₂ O	CO ₂ e ^a
	Total Emissions ^b (Metric Tons ^c)			
Phase 1	463	0.04	0.0	464
Phase 2	338	0.03	0.0	339
Phase 3	556	0.06	0.0	557
Total Construction –Impact^{d,e}	1,358	0.12	0.0	1,360

^a CO₂e = the carbon dioxide equivalent emissions of all GHGs combined. The carbon dioxide equivalent emission rate for each GHG represents the emission rate multiplied by its global warming potential (GWP). The GWPs are 1 for CO₂; 21 for CH₄; and 310 for N₂O.

^b The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. Future studies might use updated data, assumptions, and emission factors that are not currently available.

^c One metric ton equals 1,000 kilograms, 2,205 lbs, or 1.1 U.S. (short) tons.

^d Emissions might not add precisely due to rounding. For more explanation, refer to the discussion in Section 3.2.4.1

^e The impact equals total Project construction emissions minus baseline emissions. In the case of construction, baseline emissions are zero.

³In the case of electricity consumption, the GHG emissions may also be generated by out-of-state power plants.

Table 9: Total Annual GHG Emissions from Al Larson Boat Shop Operational Activities – Proposed Project

Emission Source	CO ₂	CH ₄	N ₂ O	CO ₂ e ^a
	Total Emissions (Metric Tons ^b)			
Machine Shop Operations	174	0.01	0.00	175
Building Operations	560	0.02	0.01	562
Off-road Equipment ^c	202	0.01	0.01	204
Harbor Craft Transit	6,739	0.20	0.30	6,836
Worker Trips	675	0.02	0.01	680
Total For Proposed Project	8,350	0.26	0.32	8,456
Baseline	4,318	0.14	0.18	4,375
Project Minus Baseline	4,033	0.12	0.15	4,081

^a CO₂e = the carbon dioxide equivalent emissions of all GHGs combined. The carbon dioxide equivalent emission rate for each GHG represents the emission rate multiplied by its global warming potential (GWP). The GWPs are 1 for CO₂; 21 for CH₄; and 310 for N₂O.

^b One metric ton equals 1,000 kilograms, 2205 lbs, or 1.1 U.S. (short) tons.

^c Off-road equipment includes mobile off-road equipment on-site and the new boat hoists.

Mitigated Project

Mitigation measures (**MM AQ-7 through MM AQ-10**) would apply to the proposed Project (*See Section 3.2.4.3 in Section 3.2, Air Quality, Meteorology, and Greenhouse Gases, of the Draft EIR for a full analysis on all mitigation measures related to GHG impacts*). These mitigation measures would be implemented by the responsible parties identified in Section 3.2.4.5 of the Draft EIR. While these mitigation measures would reduce GHG emissions associated with Project construction, GHG emissions would remain significant and unavoidable.

- **MM AQ-7: Compact Fluorescent Light Bulbs.** All interior buildings on the premises shall exclusively use compact fluorescent light bulbs, fluorescent light bulbs, or a technology with similar energy-saving capabilities for ambient lighting within all ALBS buildings.
- **MM AQ-8: Energy Audit.** The tenant shall conduct a third party energy audit every 5 years and install innovative power saving technology where feasible, such as power factor correction systems and lighting power regulators. Such systems help to maximize usable electric current and eliminate wasted electricity, thereby lowering overall electricity use.
- **MM AQ-9: Recycling.** The tenant shall ensure a minimum of 40 percent of all waste generated in all ALBS buildings are recycled by 2014 and 60 percent of all waste generated in all ALBS buildings are recycled by 2016.
- **MM AQ-10: Tree Planting.** Plant and maintain shade trees around the ALBS buildings where appropriate/feasible for the life of the lease.

Public Participation Guide

During the Draft EIR review phase, all interested parties may take advantage of the many opportunities to participate.

Attend a Public Meeting	<p>A public meeting on the Draft EIR will be held to provide input and learn more about the <i>Al Larsen Boat Shop Improvement Project</i>. Comments made at the public meeting will be addressed in the Final EIR.</p> <p style="text-align: center;">Wednesday, February 15, 2012 6 p.m.</p> <p style="text-align: center;">Harbor Administration Building – Board Room 425 S. Palos Verdes Street San Pedro, CA 90731</p>
Submit Comments via Mail	<p>Comments sent by mail must be postmarked by March 5, 2012 and should be sent to the following address:</p> <p style="text-align: center;">Mr. Christopher Cannon Director of Environmental Management Los Angeles Harbor Department 425 S. Palos Verdes Street San Pedro, CA 90731</p>
Submit Comments via E-mail	<p>Comments sent by e-mail should be sent by March 5, 2012 to: ceqacomment@portla.org</p> <ul style="list-style-type: none"> • Send your comments in letter format as an attachment to the e-mail. • Include a mailing address in the comment letter. • Type “Al Larsen Project” in the e-mail subject line.
Visit our website	<p>Project information provided by the Port of Los Angeles can be found at: www.portoflosangeles.org</p>
Call with Questions	<p>For questions on the <i>Al Larsen Project</i>, please contact the following:</p> <ul style="list-style-type: none"> • Port of Los Angeles, Dennis Hagner at (310) 732-3682

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