Chapter 6
Analysis of Alternatives

6.1 Introduction

This chapter presents a comparison of alternatives to the proposed Project. Various Project alternatives were considered during preparation of this Draft EIR. CEQA requires that an EIR present a range of reasonable alternatives to the proposed Project. Accordingly, the proposed Project and seven alternatives that either meet most of the proposed Project objectives and purpose and need statement, as required by CEQA, have been analyzed in this Draft EIR to provide sufficient information and meaningful detail about the environmental effects of each alternative, so that informed decision-making can occur.

The seven Project alternatives include:

- 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

6.2 Project Alternatives

6.2.1 Requirements for Alternatives

CEQA requirements for an EIR to evaluate alternatives are described fully in Section 1.6.7. Briefly, the CEQA Guidelines, Section 15126.6, require that an EIR present a range of reasonable alternatives to the proposed Project, or to the location of the project, that could feasibly attain most of the basic project objectives, but would avoid or substantially lessen any significant effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider every conceivable alternative to a project. Rather, the alternatives must be limited to ones that meet the Project objectives, are ostensibly feasible, and would avoid or substantially lessen at least one of the significant environmental effects of the proposed Project (CEQA Guidelines, Section 15126.6[f]). The EIR must also identify the environmentally

superior alternative other than the No Project Alternative. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the Project objectives, are infeasible, or do no avoid or substantially lessen any significant environmental effects (CEQA Guidelines, Section 15126.6[c]).

6.2.2 Project Objectives and Project Alternative Selection Criteria

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 NPDES and WDR permits, and take advantage of the opportunity to remove landside contaminated soils for disposal off-site and contaminated bottom sediment in Fish Harbor for use in the CDFs.

The identification by the Port of a reasonable range of alternatives factors in the legal mandates of the Port. 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 stormwater collection and treatment system.
- Demolish existing wharfs, piers and buildings/structures to allow for the subsequent creation and use of two CDF cells, which will sequester contaminated sediment and expand use of the boat shop.
- 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 new office space to support 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).

6.2.3 Alternatives Considered

This document presents a reasonable range of alternatives pursuant to CEQA. The LAHD defines a reasonable range of alternatives in light of its legal mandates under the Port of Los Angeles Tidelands Trust (Los Angeles City Charter, Article VI, Sec. 601), the California Coastal Act (PRC Div 20 §30700 et seq.), and LAHD's leasing policy (LAHD, 2006a). The Port is one of only five locations in the state identified in the California Coastal Act for the purposes of international maritime commerce (PRC Div 20 §30700 and §30701). These mandates identify the Port and its facilities as a primary economic/coastal resource of the state and an essential element of the national maritime

industry for promotion of commerce, navigation, fisheries, environmental preservation, and public recreation. In developing an appropriate range of alternatives, the starting point is the proposed Project's objectives.

Seven alternatives are analyzed in this Draft EIR. The seven alternatives meet a majority of the proposed Project's objectives and would reduce at least one potentially significant impact of the proposed Project. This chapter presents a description of these seven alternatives. The analysis of alternatives need not be as in-depth as the analysis for the proposed Project, but should be at a level that allows the decision-maker to make an informed determination regarding the differences in impacts between the proposed Project and each of its alternatives. Table 6-1 is a brief summary of the proposed Project elements associated with the alternatives analyzed (detailed in Chapter 2, Project Description, beginning in Section 2.5.1).

Table 6-1: 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 alternative 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 infra-structure (lighting, pavement, etc) and construct new office	No	Partial – some new infrastruc-ture but no office building)	No	Partial – some new infrastruc-ture 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

6.2.3.1 Alternative 1- Reduced Project: Water Quality Improvements

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

As compared to the proposed Project, this alternative would retain the existing development footprint on the site, as no buildings would be demolished/relocated and/or reconstructed on the Project site. The three marine railways would remain. Although not mandated by the Los Angeles RWQCB for removal, these three marine railways could affect the ALBS sites ability to meet its long-term water quality requirements. The land and water leasehold would remain the same, and no CDFs would be constructed. Site soils would not be disturbed and none of the existing soil contamination would be removed. Should the slope of the site be changed to alter drainage, this would involve adding new pavement on top of the existing pavement so as not to disturb the soils.

This alternative would reduce the amount of construction materials, construction vehicle emissions, and construction noise, and it would eliminate grading and earthwork and in-water construction activities. In addition, the impacts to the potentially historic resources on the site would not occur. This alternative would also shorten the construction time in comparison to the proposed Project. Minor changes to the existing operations would occur due to impediments from the dikes and berms.

6.2.3.1.1 Alternative 1 Objectives Analysis

This alternative would satisfy very few Project objectives. This alternative would only implement measures on the site to redirect water away from Fish Harbor (by placing dikes around buildings, berms around the wharfs edges, or changing the slope of the site), thus meeting the objective to improve site drainage to comply with current and future environmental requirements, including NPDES stormwater regulations. However, with the three marine railways remaining, it is unclear if the ALBS site could meet its long-term water quality requirements. Operation would occur under a new 30-year lease, with the new lease term would begin in 2012; however, the lease would involve the existing site and no new land would be created or added to the lease.

This alternative would not include any development of the site, including the installation of the 600- and 100-ton boat hoists. As a result, this alternative would not result in the modernization of the existing boat yard facilities, including the replacement of aging infrastructure with newer, state-of-the-art equipment. In addition, Alternative 1 would not optimize the existing boat shop location by increasing the site's efficiency and the land-area available to increase vessel maintenance and repair capacity.

No dredging would occur under this alternative. As a result, the navigable capacity of the facility would not be restored, and the sediments that have accumulated above the design depth of -22 feet MLLW would remain.

As Alternative 1 would not include site grading or earthwork, on-site legacy contaminants would not be removed and placed into CDF cells. The soil contaminants

beneath the Project site and within the sediments in Fish Harbor would remain and would continue to contribute to the poor water quality in Fish Harbor, and the CDFs would not be constructed as a way to store contaminated materials and create more land area on the site.

The potentially historic buildings would remain on the site under this alternative. The impacts on potentially historic buildings would be eliminated under this alternative.

While this alternative would provide for ALBS compliance with the NPDES/WDR requirements, it would not be ideal due to the lack of improvements needed to safely and efficiently utilize the site. The existing operations would not be upgraded and modernized to allow a greater number of vessels (and deeper draft vessels) to be repaired at the facility. The legacy contaminants, both on the landside and within the water, would not be removed. Thus, the sediments would continue to adversely impact the water quality in Fish Harbor and would not be beneficially reused to create the CDF and additional land space on the site.

6.2.3.2 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) would be demolished. 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, 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. However, as many of the structures have asbestos, any physical disturbance (i.e., such as related to reuse) or demolition of buildings could require asbestos abatement.

Under this alternative, impacts on operations would differ with the choice of which buildings to retain. The retention of any of the historic buildings would limit the ability of ALBS to modernize and expand the site.

This alternative would reduce the amount of construction materials, resources, construction vehicle emissions and noise, earthwork and grading, and demolition work when compared to the proposed Project. However, under Alternative 2, the operational capacity of ALBS would be constrained by access issues posed by the remaining building. Operation would occur under a new 30-year lease for the new area. The new lease term would begin in 2012.

6.2.3.2.1 Alternative 2 Objectives Analysis

This alternative would meet several of the Project objectives. Under this alternative, the site would comply with its WDR and NPDES requirements and clean up legacy contaminants. In addition, this alternative would result in the retention of only one or two of the potentially historic buildings proposed for demolition under the proposed Project, which would result in fewer impacts to historic resources as compared to the proposed Project, but would also reduce the modernization and optimization of the site.

Alternative 2 would allow for some increased capacity at the ALBS site. Although, to what extent would depend on which structures are retained. The retention of any of the historic buildings slated for demolition would impair the ability of ALBS to modernize and expand the site to the extent planned under the proposed Project. Retention of Building C1 would reduce the space available for the boat hoists from approximately 112 feet to 70 feet. The 600-ton boat hoist has an effective width (boat hoist width plus clearance) of 59 feet with a turning radius of 93 feet for the outside wheel and 33 feet for the inside wheel (see Figure 6-1). This would preclude the 600-ton hoist from accessing the ALBS backland and land area created by the construction of the Phase 2 CDF. Retention of Building A2 will result in a 36-foot corridor between Building A2 and Marine Railway 4 rendering the Phase 2 CDF inaccessible to the larger boat hoist. Retention of Building A3 will provide only a 58-foot corridor, again making the Phase 2 CDF inaccessible to the larger boat hoist.

In any situation, this alternative would limit the operational capacity on the site; however, any operational increase would be to a lesser degree than the proposed Project. Further, retention of a potentially historic building would constrain the opportunities to redesign the site to fully and most effectively comply with NPDES requirements, upgrade the existing infrastructure, constructing a new modern office space, and it would reduce the ability to clean up site legacy containments from beneath the existing pavement and buildings.

This alternative would not be ideal due to the restricted nature of the improvements.

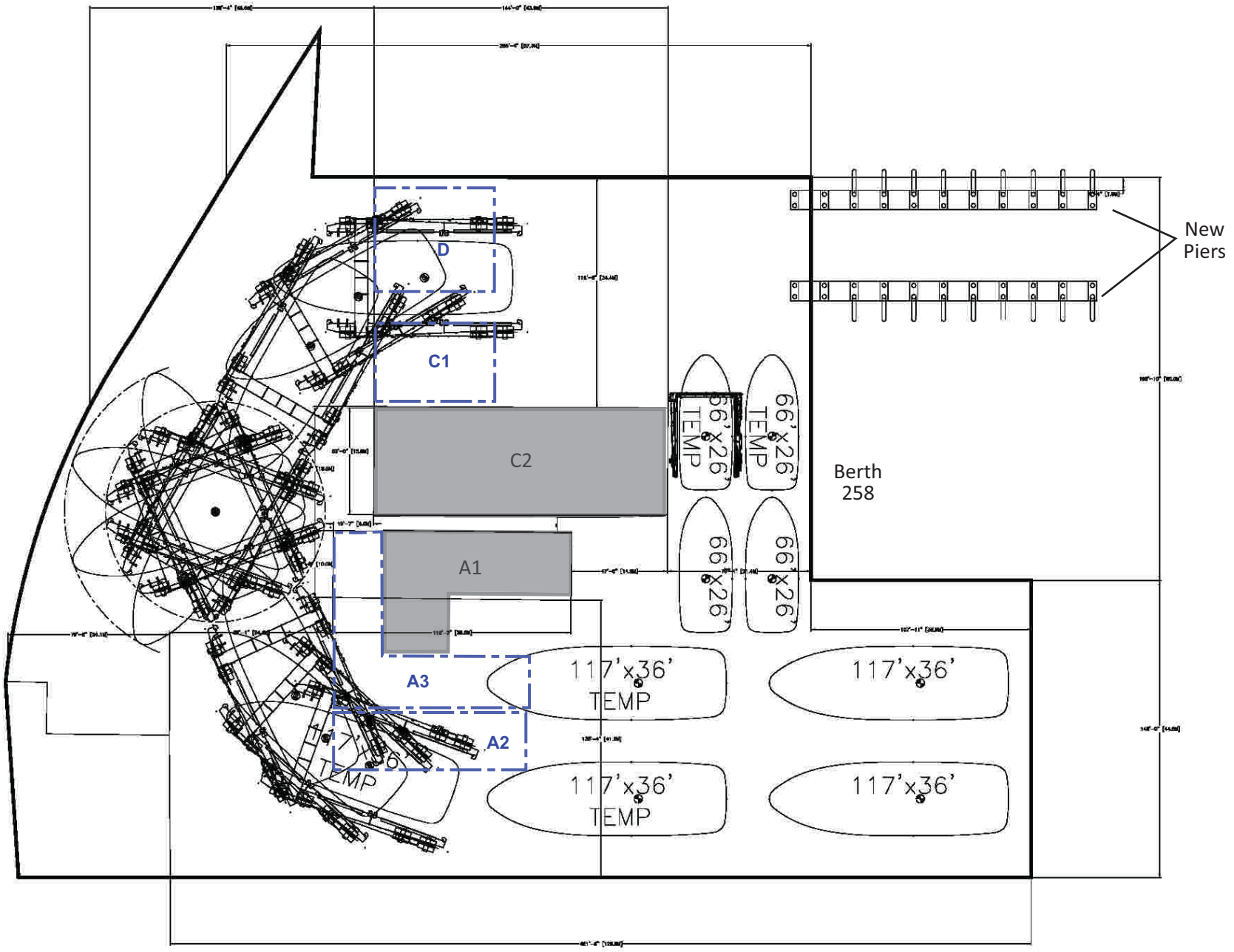
6.2.3.3 Alternative 3 - Retention of Historic Buildings

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.

Because this alternative would retain the potentially historic structures, this alternative would reduce the amount of construction materials, resources, construction vehicle emissions and noise, earthwork and grading, and demolition work when compared to the proposed Project. The increase in land area as a result of the CDF units would allow for a minimal increase in ALBS operations, however, to a lesser degree than the proposed Project as retention of the potentially historic buildings would prevent the site from operating at maximum efficiency. Operation would occur under a new 30-year lease for the new area. The new lease term would begin in 2012.

6.2.3.3.1 Alternative 3 Objectives Analysis

This alternative would meet some of the Project objectives, notably allowing the site to comply with its WDR and NPDES requirements and includes partial clean up of legacy contaminants (i.e., sediments within Fish Harbor). The potentially historic structures would remain on the site, so impacts to the potentially historic structures would be completely eliminated under this alternative. However, because the existing historic



Legend

Buildings to be demolished

Buildings to remain

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Port of Los Angeles
Al Larson Boat Shop Improvement Project
Boat Hoists – Turn Radius
Figure 6-1

buildings would not be demolished or relocated, implementation of this alternative would neither result in the complete modernization of the existing boat yard facilities nor provide for the same level of operational efficiency that would occur under the proposed Project. Further, retention of a potentially historic building would constrain the opportunities to redesign the site to fully and most effectively comply with NPDES requirements, upgrade the existing infrastructure, and would reduce the ability to clean up site legacy containments from beneath the existing pavement and buildings.

As discussed under Alternative 2, the retention of any of the historic buildings would impair the ability of ALBS to modernize and expand the site to the extent planned under the proposed Project. Retention of Building C1 would reduce the space available for the boat hoists from approximately 112 feet to 70 feet. The 600-ton boat hoist has an effective width (boat hoist width plus clearance) of 59 feet with a turning radius of 93 feet for the outside wheel and 33 feet for the inside wheel (see Figure 6-1). This would preclude the 600-ton hoist from accessing the ALBS backland and land area created by the construction of the Phase 2 CDF. Retention of Building A2 will result in a 36-foot corridor between Building A2 and Marine Railway 4 rendering the Phase 2 CDF inaccessible to the larger boat hoist. Retention of Building A3 will provide only a 58-foot corridor, again making the Phase 2 CDF inaccessible to the larger boat hoist.

This alternative would not be ideal due to the restricted nature of the improvements. In order to meet the operational needs of ALBS, including access to the existing facilities as well as the proposed 600- and 100-ton boat hoists, the potentially historic structures need to be removed. The removal of the structures is also necessary to allow for adequate clean up of legacy landside contamination.

6.2.3.4 Alternative 4 – Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, all of the potentially historic buildings slated for demolition 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). Relocation to either of the redevelopment project sites would be consistent with the Port's "Procedures to Implement the Real Estate Leasing Policy," which incorporates long-range facility planning and objectives in the two redevelopment project areas (LAHD, 2006b).

All of the components of the proposed Project would be constructed under this alternative, as all of the potentially historic buildings slated for demolition would be removed from the site. Because the potentially historic structures would be removed, the site would be able to accommodate all of the components of the proposed Project. The amount of construction materials and the actual construction process would remain the same as the proposed Project. More construction related air emissions and noise emissions would occur under this alternative due to the relocation of one or more of the potentially historic structures. Impacts would occur beyond the boundaries of the existing Project site under this alternative. Operation would occur under a new 30-year lease. The new lease term would begin in 2012.

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CDM Smith

Port of Los Angeles
Al Larson Boat Shop
Improvement Project
San Pedro and Wilmington Waterfronts
Figure 6-2

6.2.3.4.1 Alternative 4 Objectives Analysis

This alternative would meet all of the Project objectives. Under this alternative, the site would comply with its WDR and NPDES requirements, clean up legacy contaminants, and allow for the modernization and optimization of the site.

Although all of the potentially historic structures slated for demolition would be relocated, the actual relocation process would result in a loss in the integrity of the structures. Thus, under this alternative, impacts on historic resources would be reduced, but not eliminated.

This alternative would not be ideal because overall environmental impacts would be greater than the proposed Project. Under this alternative, the operational capacity of ALBS would be the same as the proposed Project because the potentially historic structures would be removed. However, this alternative would not be ideal because of the complexity and resulting high cost to relocate the potentially historic structures. The buildings have a frame structure and would need to be partially dissembled to be moved. The reassembly of the buildings would likely require improvements to meet current building standards and correct any damage that occurring during disassembly. The new site would require reinforced concrete foundations, reinforced concrete slab on grade and site development documents similar to what a new building would require (geotechnical report, design documents, permitting documents, building site permitting documents) and structural drawings. It is estimated that the approximate cost for disassembly and re-assembly at another site of Buildings C1, A2 and A3 could be as much as $12 million (refer to Appendix D3 – Structural Assessment Memorandum). The total cost for the proposed Project is estimated at $13 to $16 million; therefore, relocation would increase total cost of this alternative by as much as approximately 75 percent.

In addition, the relocation of the potentially historic structures would result in a loss of integrity of the structures and this would compromise the structure's historic significance.

6.2.3.5 Alternative 5 – Alternate Site

This alternative would construct and operate the 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, which are shown on Figure 6-3. Each alternate site is similar in size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel (former Southwest Marine shipyard), and the fourth site is on the mainland, off the East Basin. ALBS would operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites. Three of the possible alternate sites currently contain historic resources that would be impacted by the relocation of ALBS facilities to one of these sites.

Under this alternative, ALBS would need to construct facilities on the alternate site. In order to operate at a different location at levels desired under the proposed Project, it is assumed that the boat shop would require the relocation or replacement of a majority of the existing equipment, including finger piers (for new boat hoists) and new marine

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Potential Relocation Site

0 0.125 0.25 0.5 Miles

Port of Los Angeles
Al Larson Boat Shop Improvement Project
Alternate Locations
Figure 6-3

railways. In order for this alternative to be considered in reducing impacts on historic resource, it is assumed that operation at alternate location also includes the relocation of all the potentially historic structures at the existing site (Buildings A1, A2, A3, C1 and C2).

Under this alternative, ALBS would not renew its existing lease at the Project site and would be required to return the site to its pre-lease conditions, meaning all remaining structures would be demolished and legacy contaminants within the landside soils would have to be cleaned. Dredging and removal of legacy contaminants within the sediments under the water surface would occur at the existing site. No CDFs would be created and instead the dredge material would be hauled off-site to a licensed landfill. It is assumed that no dredging would occur at the new site. Returning the existing ALBS site to pre-lease conditions would also include the elimination of the flow of runoff from Seaside Avenue through the site into Fish Harbor.

Impacts would occur beyond the boundaries of the existing Project site under this alternative. Operation would occur at the alternate site under a new 30-year lease. The new lease term would begin in 2012.

6.2.3.5.1 Alternative 5 Objectives Analysis

This alternative would meet several of the Project objectives with the exception of clean up legacy contaminants located in the sediments under the water surface

Under Alternative 5, operations would move to a new site and ALBS would attempt to operate at levels similar to the proposed Project under a new 30-year lease for the alternate site. Because each of the four alternate sites are developed and the existing structures would have to be demolished or worked into the functionality of the site, each site could have different operational limitations.

Because of the demolition that would likely be required at both the existing ALBS and at the alternate site, and relocation of five potentially historic buildings, this alternative would result in a much greater amount of construction materials and resources used, construction vehicle emissions and noise, earthwork and grading, and demolition work when compared to the proposed Project. Under this alternative, environmental impacts would occur at two sites, instead of one. In addition, this alternative would result in a greater impact on potentially historic resources as three of the four alternate sites currently contain potentially historic structures that would be impacted by the relocation of ALBS facilities. Relocation of all five potentially historic structures on the ALBS site would maintain a portion of the structures historic significance because the building complexes would remain intact and continue to be part of the future boat shop location; however, this alternative would be cost prohibitive. As noted under Alternative 4, the estimated cost for disassembly and re-assembly at another site of three of the five buildings (Buildings C1, A2, and A3) could be as much as $12 million and relocation of the other two buildings would add to that estimate (costs could be as much as doubled). The total cost for the proposed Project is estimated at $13 to $16 million; therefore, relocation would increase total cost of this alternative would be more than the total cost of the proposed Project. Although by relocating all five of the potentially historic structures (both building complexes) there would be less of a loss of integrity of the structures and less of a compromise in the structure's historic significance of the ALBS buildings, other potentially historic structures and their integrity and significance would be compromised. Additionally, depending on the site size and layout, relocating all of the potentially historic buildings could result in site constraints limiting the maneuverability of the boat hoists. It would also limit the ability of ALBS to modernize

operations and replace aging infrastructure. For these reasons, this alternative is infeasible.

6.2.3.6 Alternative 6 – No Project Alternative

This alternative considers what would reasonably be expected to occur on the Project site if no future discretionary actions were to occur. Under this alternative, no development would occur on the site and no other 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. ALBS is required to implement improvements to bring the site into compliance with the current NPDES permit, including the establishment of site-specific management processes for minimizing storm water runoff containing pollutants from being discharged into surface water and ensuring that the stormwater discharges from the facility would neither cause, nor contribute to, the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water. Without implementation of measures to ensure compliance with the NPDES permit, 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: shipbuilding/ship repair facilities, light manufacturing and industrial activities, or ocean resource-oriented industries.

6.2.3.6.1 Alternative 6 Objectives Analysis

Because none of the proposed improvements would be made, and the ALBS would cease operations after approximately 87 years at the present location, this alternative would not meet any of the Project objectives with the exception of clean up of landside contaminated soils.

Under this alternative, most of the impacts would be less than the proposed Project. However, the impacts related to clearing the site of current operations would occur, including impacts related to construction air quality, noise, water quality, and hazardous materials. In addition, the potentially historic structures on the site would have to be relocated or demolished under this alternative, in order to return the site to its pre-lease conditions. Removal of the structures would result in a significant and unavoidable impact on potentially historic resources. As part of returning the site to pre-lease conditions, once the buildings have been removed landside contaminated soil would be excavated and removed off-site.

Dredging and removal of legacy contaminants within the sediments under the water surface would occur, however, no CDFs would be created. The dredge material would be hauled off-site to a licensed landfill. Runoff from Seaside Avenue would continue to flow through the site into Fish Harbor.

This alternative is infeasible in that it would require the cessation of ALBS operations within the Port, while including significant and unavoidable impacts on air quality and historic resources.

6.2.3.7 Alternative 7 – No Federal Action

This alternative represents what would reasonably be expected to occur in the foreseeable future if the USACE Permit were not approved. Under the No Federal Action

Alternative, there would be no dredging, no CDF construction (no removal of historical sediment and soil contamination), and no construction of the concrete piers for the 600- and 100-ton boat hoists. However, the landside construction could occur and a new lease would be issued to ALBS for the existing lease area. Operation would occur at the alternate site under a new 30-year lease for the existing site. The new lease term would begin in 2012.

6.2.3.7.1 Alternative 7 Objectives Analysis

This alternative would only meet a few of the Project objectives. This alternative would only implement landside improvements, including those improvements required to meet NPDES stormwater regulations. Improvements would be made that would bring the operation into compliance with the NPDES stormwater requirements. As a result, ALBS would be able to enter into a new 30-year lease.

In addition, the landside aging infrastructure would be improved, including the replacement of paving, lighting, and utilities. The potentially historic structures would also be removed under this alternative.

This alternative would not include any of the proposed development on the site that involves impacting the water, including the installation of the 600- and 100-ton boat hoists. As a result, this alternative would not result in the complete modernization of the existing boat yard facilities, including the replacement of aging infrastructure with newer, state-of-the-art equipment. In addition, because the majority of the proposed development would not occur, it would not optimize the existing boat shop location by increasing the land available for use in order to safely increase shipbuilding and vessel maintenance and repair capacity.

No dredging would occur under this alternative. As a result, the navigable capacity of the facility would not be restored and the sediments that have accumulated above the design depth of -22 feet MLLS would remain. ALBS would not be able to serve larger vessels without dredging.

As only landside improvements would occur under this alternative, Project site legacy contaminants in the sediments under the water surface (within Fish Harbor) would not be removed and placed into CDF cells. The contamination would thereby continue to contribute to a degradation of water quality in Fish Harbor.

Impacts under this alternative would be less than the proposed Project, as less construction would occur in conjunction with implementation of the alternative. Impacts on air quality and noise, in particular, would be reduced. However, impacts on the potentially historic resources would the similar to the proposed Project, as the potentially historic structures would be demolished under this alternative. In addition, the beneficial impacts on water quality and hazardous materials would not occur as the maintenance dredging would not occur and legacy contaminants in the sediments under the water surface in Fish Harbor would not be cleaned up. For these reasons, and the fact that this alternative would meet very few of the Project objectives, this alternative is infeasible.

6.2.3.8 Summary of Alternatives

Table 6-2 is a comparison of the proposed Project and the seven Project alternatives and their capabilities of accomplishing the Project objectives, as well as their potential to avoid or substantially reduce significant impacts to historical resources.

1 **Table 6-2: Comparison of Proposed Project and Alternatives to the Project Objectives**

Project Alternative	Does Alternative Avoid or Substantially Lessen Impacts to Potentially Historical Resources?	Key Project Objectives						
		Place ALBS in compliance with its WDR and NPDES requirements by re-contouring the site, removing three existing marine railways and constructing a stormwater collection and treatment system.	Demolish existing wharfs, piers and buildings/structures to allow for the subsequent creation and use of two CDF cells, which will sequester contaminated sediment and expand use of boat shop.	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 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).
Proposed Project	**NO**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**
Alternative 1 - Reduced Project: Water Quality Improvements	**YES**	**Partial**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Alternative 2 - Reduced Project: Limited Demolition	**Partial**	**YES**	**YES**	**YES**	**Partial**	**NO**	**Partial**	**Partial**
Alternative 3 - Retention of Historic Buildings	**YES**	**YES**	**YES**	**YES**	**Partial**	**NO**	**NO**	**YES**
Alternative 4 - Relocation of Historic Buildings	**NO**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**
Alternative 5 - Alternate Site	**NO**	**YES**	**NO**	**NO**	**NO**	**YES**	**YES**	**Partial**
Alternative 6 – No Project	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**YES**	**NO**
Alternative 7 - No Federal Action	**NO**	**Partial**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

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6.3 Impacts Analysis of Project Alternatives

Section 3 of the Draft EIR analyzes the potential impacts associated with the construction and operation of the proposed Project for the 13 environmental resource areas. As with the proposed Project, several of the alternatives have significant and unavoidable impacts for at least one of the three significant and unavoidable environmental resources (Air Quality, Meteorology, and Greenhouse Gases, Cultural Resources, and Noise). One of the environmental resources evaluated (Biological Resources) has potentially significant impacts that can be mitigated to a less than significant level for all of the alternatives with water construction. As with the proposed Project, the remaining nine environmental resource areas (Aesthetics and Visual Resources, Geology, Groundwater and Soils, Hazards and Hazardous Materials, Land Use, Population and Housing, Public Services and Utilities, Traffic and Transportation, and Water Quality, Sediments, and Oceanography) have less than significant impacts associated with the alternatives.

The discussion below describes the impacts for each of the resources and identifies to which alternative the impacts apply.

6.3.1 Alternative Impact Analysis Summary

Table 6-3 presents a summary of the results of the analysis for the resource areas that involve significant unavoidable impacts or potentially significant impacts that can be mitigated to a less than significant level associated with one or more of the alternatives. Section 6.3.2 identifies and discusses in detail the alternatives that would result in significant unavoidable impacts. Resources with significant impacts that can be mitigated to less than significant are discussed in Section 6.3.3. The nine resource areas with less than significant impacts (not requiring any mitigation) are not listed in the tables below as their impacts are similar or less than the proposed Project and, therefore, do not require ranking in Table 6-4. However, these resources are discussed in more detail in Section 6.3.4.

Table 6-3: Summary of Significant Impacts by Alternative

Environmental Resource Area*	Proposed Project	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Air Quality	S	S	S	S	S	S	S	S
Biological Resources	M	L	M	M	M	M	L	L
Cultural Resources	S	N	S	N	S	S	S	S
Noise	S	L	S	S	S	S	L	L

Notes:

*Only environmental resources with unavoidable significant impacts or significant but mitigable impacts are included in the table and the analysis used to rank alternatives; the analysis includes project-level impacts, not cumulative effects.

S = Unavoidable significant impact

M = Significant but mitigable impact

L = Less than significant impact (not significant)

N = No impact

Table 6-4 ranks the alternatives on the basis of a comparison of their environmental impacts with those of the proposed Project. The ranking is based on the significance determinations for each resources area, as discussed in Chapter 3, Environmental Analysis, and the qualitative analysis below, and reflects differences in the levels of impact among alternatives. This ranking also takes into consideration the relative number of significant impacts that are mitigated to a level below significance, the number of impacts that remain significant after mitigation, and the relative intensity of impacts. As shown in Table 6-4, Alternative 1 - Reduced Project: Water Quality Improvements, is the environmentally superior alternative because it would impact fewer resources.

Table 6-4: Comparison of Alternatives to the Proposed Project

Environmental Resource Area*	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Air Quality	-2	-1	-1	-1	+1	-1	-1
Biological Resources	-1	0	0	0	0	-1	-1
Cultural Resources	-2	-1	-2	-1	-1	0	0
Noise	-2	-1	-1	+1	0	-2	-2
Total	-7	-3	-4	+1	0	-4	-4

Notes:

*

(-2) = Impact considered to be substantially less when compared with the proposed Project.

(-1) = Impact considered to be somewhat less when compared with the proposed Project.

(0) = Impact considered to be equal to the proposed Project.

(1) = Impact considered to be somewhat greater when compared with the proposed Project.

(2) = Impact considered to be substantially greater when compared with the proposed Project.

Where significant unavoidable impacts would occur across numerous alternatives but there are impact intensity differences between those alternatives, decimal points are used to differentiate alternatives (i.e., in some cases, there are differences at the individual impact level, such as differences in number of impacts or relative intensity).

6.3.2 Resources with Significant Unavoidable Impacts

As noted above, the resource areas Air Quality, Meteorology, and Greenhouse Gases, Cultural Resources and Noise, would result in both unavoidable and significant impacts, as analyzed in Chapter 3, Environmental Analysis, for the proposed Project and following is a qualitative analysis for each alternative:

6.3.2.1 Air Quality, Meteorology, and Greenhouse Gases

6.3.2.1.1 Proposed Project

Proposed Project construction activities would involve the use of off-road construction equipment, on-road trucks, tugboats, and dredging equipment. Because these sources would primarily use diesel fuel, they would generate emissions of diesel exhaust in the form of VOC, CO, NO_X, SO_X, PM_{10} and $PM_{2.5}$. In addition, off-road construction equipment traveling over unpaved surfaces and performing earthmoving activities such as site clearing or grading would generate fugitive dust emissions in the form of PM_{10} and $PM_{2.5}$. Building demolition activities would also generate fugitive dust emissions. Site paving activities would generative fugitive emissions of VOCs. Worker commute trips would generate vehicle exhaust and paved road dust emissions.

Construction-related emissions would vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content.

Construction of the proposed Project is anticipated to commence in 2012 and last for approximately three years. Phase 1 would last approximately one year, employing approximately 30 people. Phase 2 would last approximately six to ten months and would employ 30 people. Phase 3 would last approximately six months and would employ 20 people. Construction would take place on the site Monday through Friday (with some Saturdays) from 7:00 am until 3:30 pm. Operation of the proposed Project would occur under a new 30-year lease. The new lease term would begin in 2012.

6.3.2.1.2 Alternative 1 – Reduced Project: Water Quality Improvements

Construction

Construction of measures on the site to meet Los Angeles RWQCB requirements would involve off-road equipment and limited earth-moving activities. However construction activities would be substantially reduced from proposed Project construction and would be less likely to exceed a SCAQMD threshold for criteria pollutant emissions.

The limited construction activity required for Alternative 1 would generate substantially less emissions of CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$ as compared to the proposed Project. Table 6-5 presents unmitigated Alternative 1 peak daily emissions. Unmitigated peak daily emissions, while less than the proposed Project, would exceed the SCAQMD NOx threshold for construction emissions, and are therefore significant. Emissions of all other criteria pollutants would not exceed SCAQMD thresholds in any phase.

Table 6-5: Peak Daily Emissions Associated with Alternative 1 – Reduced Project: Water Quality Improvements – Without Mitigation

Emission Source	Peak Daily Emissions (lb/day)[c]					
	VOC	CO	NO_X	SO_X	PM_{10}[a]	$PM_{2.5}$[a]
Alternative 1 Construction						
Civil Construction	14	61	113	<1	12	6
Alternative 1 Impact[b,d]	*14*	*61*	***113***	*<1*	*12*	*6*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

Notes:
[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.
[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

To reduce the level of impact during construction, Mitigation Measures **MM AQ-1 through MM AQ-6** would be applied. After mitigation, construction emissions shown in Table 6-6 would be less than significant.

Table 6-6: Peak Daily Emissions Associated with Alternative 1 – Reduced Project: Water Quality Improvements – With Mitigation

Emission Source	Peak Daily Emissions (lb/day)[c]					
	VOC	CO	NO_X	SO_X	PM_{10}[a]	$PM_{2.5}$[a]
Alternative 1 Construction						
Civil Construction	5	55	77	<1	6	4
Alternative 1 Impact[b,d]	*5*	*55*	*77*	*<1*	*6*	*4*
Thresholds	75	550	100	150	150	55
Significant?	No	No	No	No	No	No

Notes:
[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.
[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

Ambient air concentrations would be anticipated to be significant for Federal 1-hour NO_2 NAAQS based off the relative emissions shown for the proposed Project in Table 3.2-11 and the emissions shown for Alternative 1 in Table 6.6 above.

Operation

There would be no increase in operational emissions under Alternative 1 (current operations would continue). The new 600- and 100-ton boat hoists would not be installed and the dredging would not occur, therefore the capacity of the boat shop would remain the same, and the number of boats repaired would not be expected to increase as a result of Alternative 1 improvements. In addition, ALBS would not be able to accommodate larger vessels because dredging would be required to accommodate the larger vessels. Operational emissions impacts (Alternative 1 minus the baseline) would be zero and therefore there would be no impacts under this alternative.

Health Risk

Proposed Project health risk impacts shown in Table 3.2-18 are driven by construction emissions, specifically dredging for acute impacts. Construction emissions would need to be reduced by approximately 60 percent to eliminate these impacts. The residential cancer risk significant impact in Table 3.2-18 is caused by diesel PM emissions, which would be anticipated to be reduced sufficiently in Alternative 1 to remove this impact due to the substantially reduced construction activity under Alternative 1. In addition, the acute residential and occupational risks would similarly be anticipated to be less than significant under Alternative 1 due to the reduction in dredging emissions.

Greenhouse Gas Emissions

Emissions from Alternative 1 operations would be identical to the existing boat shop; therefore the impact for all GHGs would be zero. However the limited construction activities would emit GHGs and therefore Alternative 1 GHG emissions would be greater than zero and impacts would be significant. Impacts under this alternative would be less than the proposed Project.

To reduce the emission of GHGs during construction, Mitigation Measures **MM AQ-1 through MM AQ-6** would be applied. While Mitigation Measures **MM AQ-1 through MM AQ-6** would be applied to Alternative 1 construction, GHG emissions would continue to be greater than zero. After mitigation, GHG emissions from construction would therefore remain significant and unavoidable.

6.3.2.1.3 Alternative 2 – Reduced Project: Limited Demolition

Construction

Alternative 2 peak daily emissions are similar to the proposed Project emissions with the exception of building demolition, which would occur during the peak day for the proposed Project, but not for Alternative 2. The limited construction activity required for Alternative 2 would not generate substantially less emissions of CO, VOC, NOx, SOx, PM_{10}, or $PM_{2.5}$ as compared to the proposed Project. Table 6-7 presents Alternative 2 peak daily emissions.

Peak daily emissions shown in Phases 1 through 3 would exceed the SCAQMD NOx threshold for construction emissions and 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.

Table 6-7: Peak Daily Emissions Associated with Alternative 2 - 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	9	7
Civil Construction	6	25	57	<1	4	3
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 1 Impact[b,d]	*25*	*98*	***258***	*<1*	*13*	*10*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	13	49	126	<1	6	5
Civil Construction	74	287	852	1	65	41
Building Demolition	2	12	18	<1	1	1
Peak Daily Phase 2 Impact[b,d]	***89***	*349*	***997***	*1*	*72*	*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	29	114	285	<1	15	9
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 3 Impact[b,d]	*29*	*114*	***285***	*<1*	*15*	*9*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.
[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

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To reduce the level of impact during construction, Mitigation Measures **MM AQ-1 through MM AQ-6** would be applied. With implementation of these mitigation measures, emissions from construction activities would remain significant for NOx in all phases. These mitigation measures would be implemented by the responsible parties identified in Section 3.2.4.5. Table 6-8 presents the maximum daily criteria pollutant emissions associated with construction of Alternative 2, after mitigation, which shows NOx levels would remain significant. Impacts would therefore be significant and unavoidable during construction for NO_x.

Table 6-8: Peak Daily Emissions Associated with Alternative 2 - With 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	17	73	194	<1	8	7
Civil Construction	1	13	19	<1	1	1
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 1 Impact[b,d]	*19*	*86*	***213***	*<1*	*10*	*8*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	12	49	125	<1	6	5
Civil Construction	18	99	264	1	31	10
Building Demolition	2	12	17	<1	1	1
Peak Daily Phase 2 Impact[b,d]	*32*	*160*	***406***	*1*	*38*	*16*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 3 Construction						
Marine Construction	0	0	0	0	0	0
Civil Construction	12	82	130	<1	9	7
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 3 Impact[b,d]	*12*	*82*	***130***	*<1*	*9*	*7*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.

[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.

[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

Ambient air concentrations before and after mitigation would be nearly identical to the proposed Project concentrations discussed in Section 3.2.4.3, Tables 3.2-14 and 3.2-15. Ambient air concentrations would be significant for 1-hour NO_2 and peak daily PM_{10} and $PM_{2.5}$. While the application of Mitigation Measures **MM AQ-1 through MM AQ-6** would reduce emissions from Alternative 2 construction, ambient concentrations would remain significant and unavoidable for NO_2, PM_{10} and $PM_{2.5}$.

Operation

Alternative 2 operations would be similar to the proposed Project, and the impacts would be comparable to the proposed Project impacts. Section 3.2.4.3, Table 3.2-16 presents the operational emissions associated with the proposed Project. Operational emissions would be less than significant for all criteria pollutants and no mitigation is required. As shown in Table 3.2-17, proposed Project operations would generate significant off-site ambient air pollutant concentrations for 1-hour NO_2 and peak daily PM_{10} and $PM_{2.5}$. As with the proposed Project, the main source of NOx 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 NO_2 emissions. Therefore, operational emissions of 1-hour NO_2 and peak daily PM_{10} and $PM_{2.5}$ would remain significant and unavoidable.

Health Risk

Proposed Project health risk impacts shown in Table 3.2-18 are driven by construction emissions. A major source of acute risk is dredging equipment. The residential cancer risk significant impact in Table 3.2-18 is caused by diesel PM emissions, which would not be anticipated to be reduced sufficiently in Alternative 2 to remove this impact. After application of Mitigation Measures **MM AQ-1 through MM AQ-6**, impacts would be similar to those shown in Table 3.2-21 for the proposed Project. Therefore, after mitigation, the residential cancer risk and the residential and occupational acute hazard indices remain significant and unavoidable for construction activities.

Greenhouse Gases

Alternative 2 GHG construction emissions would be similar, but slightly less than the GHG emissions for the proposed Project shown in Section 3.2.4.3, Table 3.2-22. Alternative 2 operational GHG emissions would be the same as for the proposed Project shown in Table 3.2-23. While Mitigation Measures **MM AQ-1 through MM AQ-10** would be applied to Alternative 2 construction and operations, GHG emissions would still be greater than the baseline. No other GHG-related mitigation measures are applied to proposed Project operations. Therefore after mitigation, GHG emissions from construction and operations would therefore remain significant and unavoidable.

6.3.2.1.4 Alternative 3 – Retention of Historic Buildings

Construction

This alternative would retain both potentially historic buildings on the site, thus reducing the amount of demolition required as part of Project construction. Building demolition is not assumed to be part of the peak daily emissions for proposed Project or proposed Project without impacts on the potentially historic buildings. However under Alternative 3 there would be less building construction which would decrease the amount of

construction emissions generated during Phase 3 compared to the proposed Project. Maximum emissions for each construction phase were determined by totaling the daily emissions from those construction activities that overlap in the proposed construction schedule.

Peak daily emissions shown in Table 6-9 for Phase 1, Phase 2, and Phase 3 would exceed the SCAQMD NOx threshold and 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.

Table 6-9: Peak Daily Emissions Associated with Alternative 3 – Retention of Historic Buildings Construction Activities – 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	9	7
Civil Construction	6	25	57	<1	4	3
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 1 Impact[b,d]	*25*	*98*	***258***	*<1*	*13*	*10*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	13	49	126	<1	6	5
Civil Construction	74	287	852	1	65	41
Building Demolition	2	12	18	<1	1	1
Peak Daily Phase 2 Impact[b,d]	***89***	*349*	***997***	*1*	*72*	*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	25	99	257	<1	19	13
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 3 Impact[b,d]	*25*	*99*	***257***	*<1*	*19*	*13*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.
[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

To reduce the level of impact during construction Mitigation Measures **MM AQ-1 through MM AQ-6** would be applied. After mitigation, construction emissions shown in Table 6-10 for NOx in Phases 1, 2 and 3 would remain significant and unavoidable.

Table 6-10: Peak Daily Emissions Associated with Alternative 3 – Retention of Historic Buildings Construction Activities – With 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	17	73	194	<1	8	7
Civil Construction	1	13	19	<1	1	1
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 1 Impact[b,d]	*19*	*86*	***213***	*<1*	*10*	*8*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	12	49	125	<1	6	5
Civil Construction	18	99	264	1	31	10
Building Demolition	2	12	17	<1	1	1
Peak Daily Phase 2 Impact[b,d]	*32*	*160*	***406***	*1*	*38*	*16*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 3 Construction						
Marine Construction	0	0	0	0	0	0
Civil Construction	9	68	103	<1	7	5
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 3 Impact[b,d]	*9*	*68*	***103***	*<1*	*7*	*5*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.
[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

The ambient air concentrations for Alternative 3 would be less than the proposed Project concentrations shown in Table 3.2-14 and 3.2-15, but would still be significant for 1-hour NO_2 and daily PM_{10} and $PM_{2.5}$ concentrations. Although emissions and subsequently ambient air concentrations would be reduced with mitigation, impacts would be significant and unavoidable for 1-hour NO_2, and 24-hour PM_{10} and $PM_{2.5}$.

Operation

The operational air quality emissions under this alternative would be less than the proposed Project. Under this alternative, there would not be enough room on the Project site to operate the 600-ton boat hoist. In addition, because one or two of the existing historic buildings proposed for demolition under the proposed Project would not be demolished or relocated under Alternative 3, implementation of this alternative would not result in the complete modernization of the existing boat shop facilities and would not provide for the same level of operational efficiency that would occur under the proposed Project. As a result, the boat shop would not be able to operate at the maximum capacity, including servicing the same number and size of vessels, as proposed under the proposed Project.

Therefore, operational emissions would be slightly less than the proposed Project and the unmitigated air quality impacts associated with proposed Project without Impacts on Historic Buildings operations would be less than significant.

Health Risk

Proposed Project health risk impacts shown in Table 3.2-18 are driven by construction emissions. A major source of acute risk is dredging equipment. The residential cancer risk significant impact in Table 3.2-18 is caused by diesel PM emissions, which would not be anticipated to be reduced sufficiently in Alternative 3 to remove this impact. After application of Mitigation Measures **MM AQ-1 through MM AQ-6**, impacts would be similar to those shown in Table 3.2-20 for the proposed Project. Therefore, after mitigation, the residential cancer risk and the residential and occupational acute hazard indices remain significant and unavoidable for construction activities.

Greenhouse Gas Emissions

Greenhouse gas emissions from proposed Project without Impacts on Historic Buildings would be similar, if not slightly less due to a slight decrease in operational efficiency on the site, to the emissions for the proposed Project. However GHG emissions from construction and operations would exceed the baseline (be greater than zero). Therefore emissions of Project-related GHGs would be significant. While Mitigation Measures **MM AQ-1 through MM AQ-6** would be applied to Alternative 3 construction and Mitigation Measures **MM AQ-7 through MM AQ-10** would be applied to Alternative 3 operations, GHG emissions would continue to be greater than zero. After mitigation, GHG emissions from construction and operations would therefore remain significant and unavoidable.

6.3.2.1.5 Alternative 4 –Relocation of Historic Buildings

Construction

Table 6-11 presents the maximum daily criteria pollutant emissions associated with construction of Alternative 4 – Relocation of Historic Buildings, before mitigation. Phase 1 peak daily emissions are higher than the proposed Project emissions because the potentially historic buildings slated for demolition would be relocated and reconstructed during Phase 2 at the new location, concurrent with construction of the new office building and infrastructure improvements at the Project site. Disassembly of the potentially historical buildings for relocation would occur during Phase 1, and the reassembly would occur during Phase 2.

Table 6-11: Peak Daily Emissions Associated with Alternative 4 – Relocation of Historic Buildings Construction Activities – 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	9	7
Civil Construction	6	25	57	<1	4	3
Building Demolition/disassembly	2	11	16	<1	2	1
Peak Daily Phase 1 Impact[b,d]	27	109	***273***	<1	15	11
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	13	49	126	<1	6	5
Civil Construction	74	287	852	1	65	41
Building Demolition	2	12	18	<1	1	1
Peak Daily Phase 2 Impact[b,d]	***89***	*349*	***997***	*1*	*72*	*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	23	92	243	<1	18	12
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 3 Impact[b,d]	*23*	*92*	***243***	*<1*	*18*	*12*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.
[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

Peak daily emissions in Phase 1, Phase 2, and Phase 3 would exceed the SCAQMD NOx threshold for construction emissions and peak daily emissions 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.

To reduce the level of impact during construction Mitigation Measures **MM AQ-1 through MM AQ-6** would be applied. Table 6-12 presents the maximum daily criteria pollutant emissions associated with construction of the proposed Project with relocation of the potentially historic buildings, after the application of Mitigation Measures **MM AQ-1 through MM AQ-6.** After mitigation, construction emissions of NOx in Phase 1 and Phase 2 would remain significant and unavoidable.

Table 6-12: Peak Daily Emissions Associated with Alternative 4 - Relocation of Historic Buildings Construction Activities –With 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	17	73	194	<1	8	7
Civil Construction	1	13	19	<1	1	1
Building Demolition	2	11	16	<1	2	1
Peak Daily Phase 1 Impact[b,d]	*21*	*97*	***229***	*<1*	*12*	*9*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	12	49	125	<1	6	5
Civil Construction	18	99	264	1	31	10
Building Demolition	2	12	17	<1	1	1
Peak Daily Phase 2 Impact[b,d]	*32*	*160*	***406***	*1*	*38*	*16*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 3 Construction						
Marine Construction	0	0	0	0	0	0
Civil Construction	7	62	90	<1	7	5
Building Demolition	0	0	0	0	0	0
Peak Daily Phase 3 Impact[b,]	*7*	*62*	*90*	*<1*	*7*	*5*
Thresholds	75	550	100	150	150	55
Significant?	No	No	No	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.

[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.

[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

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Ambient air concentrations would be anticipated to be greater than for the proposed Project, because peak short-term emissions would be greater. Therefore ambient air concentrations of 1-hour NO_2, and 24-hour PM_{10} and $PM_{2.5}$ would be significant and unavoidable.

Operation

The operations of Alternative 4 from an air quality standpoint would be similar to the proposed Project emissions in Section 3.2.4.3 Table 3.2-16. The capacity of the boat shop is assumed to be similar and there would be no difference in boat repair activities that would occur after Project completion. For purposes of this analysis, it is assumed that the relocated buildings would remain vacant and thus there would be no emissions associated with their operation.

The unmitigated peak daily emissions would not exceed baseline emissions for any criteria pollutants in 2014. Therefore, the unmitigated air quality impacts associated with proposed Project without Impacts on Historic Buildings operations would be less than significant.

Health Risk

Proposed Project health risk impacts shown in Table 3.2-18 are driven by construction emissions. A major source of acute risk is dredging equipment. The residential cancer risk significant impact in Table 3.2-18 is caused by diesel PM emissions, which would not be anticipated to be reduced sufficiently in Alternative 4 to remove this impact given that the level of dredging that would occur is similar to that of the proposed Project. With Mitigation Measures **MM AQ-1 through MM AQ-6**, impacts would be similar to those shown in Table 3.2-20 for the proposed Project. Therefore, after mitigation, the residential cancer risk and the residential and occupational acute hazard indices remain significant and unavoidable for construction activities.

Greenhouse Gas Emissions

Greenhouse gas emissions from Alternative 4 - Relocation of Historic Buildings would be similar, though slightly higher during construction, to the emissions for the proposed Project as shown in Tables 3.2-22 and 3.2-23. Construction and operational GHG emissions would exceed the baseline. Therefore emissions of Project-related GHGs would be significant. While Mitigation Measures **MM AQ-1 through MM AQ-10** would be applied to the proposed Project GHG emissions would still increase over the baseline. After mitigation, GHG emissions from construction and operations would therefore remain significant and unavoidable.

6.3.2.1.6 Alternative 5 – Alternate Site

Construction

Table 6-13 presents the maximum daily criteria pollutant emissions associated with construction of Alternative 5 – Alternate Site, before mitigation. Construction emissions associated with the alternate site location would be higher than the proposed Project, as this alternative contains a number of components on both the ALBS and the alternate site. Under this alternative, all existing facilities on the ALBS site would have to be relocated or reconstructed on the alternate site, the facilities proposed under the proposed Project would be constructed at the new location, and all of the remaining buildings at the existing ALBS site would need to be demolished/relocated. To conservatively estimate

the worst-case emissions from Alternative 5, the demolition of the existing ALBS site is assumed to occur simultaneously with Phase 1 demolition/construction at the alternate site.

This alternative would contain as many of the components of the proposed Project as allowed by the particular alternate site. However, it is assumed that no dredging at the new site would be required. Dredging of existing site would still occur to remove the contaminated sediments. The sediments would be dried at the north end of Fish Harbor than hauled off-site within 30 days to landfill licensed to receive hazardous waste. Each of the four alternate sites is developed to varying degrees and the buildings on each of the sites would have to be demolished, or incorporated into the ALBS operations on that site.

Peak daily emissions in Phases 1, 2, and 3 would exceed the SCAQMD NOx threshold for construction emissions, while peak daily emissions in Phase 2 would exceed the SCAQMD VOC, CO, and $PM_{2.5}$ thresholds for construction emissions. Emissions of all other criteria pollutants would not exceed SCAQMD in any phase.

To reduce the level of impact during construction Mitigation Measures **MM AQ-1 through MM AQ-6** would be applied. As shown in Table 6-14, with the proposed Project, after mitigation, construction emissions would remain significant for NOx in all phases.

Table 6-13: Peak Daily Emissions Associated with Alternative 5 - Alternate Site –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	9	7
Civil Construction	12	49	113	<1	8	6
Building Demolition	2	11	16	<1	2	1
Additional Demolition	12	57	95	<1	23	5
Peak Daily Phase 1 Impact[b,d]	*44*	*191*	***424***	*<1*	*42*	*19*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	13	49	126	<1	6	5
Civil Construction	147	575	1,702	2	129	83
Building Demolition	2	12	18	<1	1	1
Peak Daily Phase 2 Impact[b,d]	***162***	***636***	***1,847***	*2*	*136*	***89***
Thresholds	75	550	100	150	150	55
Significant?	**Yes**	**Yes**	**Yes**	No	No	**Yes**
Phase 3 Construction						
Marine Construction	0	0	0	0	0	0
Civil Construction	48	190	498	1	37	25
Building Demolition	3	13	18	<1	1	1
Dredge Material Hauling	14	55	167	<1	13	8
Peak Daily Phase 3 Impact[b,d]	*64*	*258*	***684***	*1*	*52*	*34*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.

[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.

[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

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Table 6-14: Peak Daily Emissions Associated with Alternative 5 Alternate Site –With 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	17	73	194	<1	8	7
Civil Construction	2	26	39	<1	3	2
Building Demolition	2	11	16	<1	2	1
Additional Demolition	12	57	95	0	23	5
Peak Daily Phase 1 Impact[b,d]	*33*	*167*	***343***	*<1*	*36*	*15*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	12	49	125	<1	6	5
Civil Construction	36	198	527	2	62	20
Building Demolition	2	12	17	<1	1	1
Peak Daily Phase 2 Impact[b,d]	*50*	*259*	***669***	*2*	*68*	*26*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 3 Construction						
Marine Construction	0	0	0	0	0	0
Civil Construction	14	97	155	<1	11	8
Building Demolition	2	12	17	<1	1	1
Dredge Material Hauling	14	55	167	<1	13	8
Peak Daily Phase 3 Impact[b,d]	*30*	*164*	***339***	*<1*	*25*	*17*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

Notes:

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.

[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.

[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

Ambient air concentrations would be anticipated to be greater than for the proposed Project, because peak short-term emissions in all three phases would be greater than those associated with the proposed Project. Therefore ambient air concentrations of 1-hour NO_2, and 24-hour PM_{10} and $PM_{2.5}$ would be significant and unavoidable.

Operation

The operations of this alternative from an air quality standpoint would be similar to the proposed Project. The operational capacity of ALBS would be as similar as possible to the proposed Project; therefore there would be no difference in boat repair activities that would occur after Project completion.

The unmitigated peak daily emissions would not exceed baseline emissions for any criteria pollutants in 2014. Therefore, the unmitigated air quality impacts associated with proposed Project operations would be less than significant.

Health Risk

Health risk impacts are dependent upon the proximity of construction activities to residences, worker locations, and other sensitive uses. Construction activities associated with reassembling the relocated buildings and making the on-site improvements under this alternative would occur at a different location than for the proposed Project. However if the alternative location is adjacent to Fish Harbor, along the Main Channel, or near the East Basin, significant residential impacts are still anticipated. In addition, occupational impacts are still anticipated to be significant because industrial/commercial uses would be in close proximity to any other potential alternative ALBS location where construction might occur. Further, while no operational impacts would occur at the existing site, demolition and dredging activities would continue to occur. More construction emissions are anticipated from Alterative 5 than the proposed Project due to the additional work needed to return the existing ALBS site to its original condition and relocated the five potentially historic buildings to the new site. Therefore it is possible that the Alternative 5 impacts are greater than the proposed Project health risk impacts shown in Tables 3.2-18 and 3.2-20. After mitigation, health risk impacts would remain significant and unavoidable for construction activities.

Greenhouse Gas Emissions

Greenhouse gas emissions from this alternative would be greater than the emissions for the proposed Project due to the additional construction emissions required to return the existing ALBS site to its original condition as well as construct the new site. Construction and operational GHG emissions would exceed the baseline. Therefore emissions of Project-related GHGs would be significant. While Mitigation Measures **MM AQ-1 through MM AQ-10** would be applied to proposed Project construction and operations, emissions are still anticipated to increase over baseline GHG emissions. After mitigation, GHG emissions from construction and operations would therefore remain significant and unavoidable.

6.3.2.1.7 Alternative 6 – No Project

Construction

This alternative represents the scenario under which the proposed Project would not be constructed. Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no development would occur, including the required water quality improvements, ALBS would cease operation on the site. Under this scenario, ALBS would be required to clear the site and return it to pre-lease conditions.

Emissions associated with this alternative would include those associated with demolition and the haul away of demolition debris and contaminated landside soils, dredging and haul away of the contaminated sediments, and grading the site to return it to pre-lease conditions. Construction emissions under this alternative would be greater than the proposed Project given the large amount of demolition, excavation, site grading, and hauling of sediment required.

Table 6-15 presents the maximum daily criteria pollutant emissions associated with construction of Alternative 6 – No Project. Peak daily emissions in Phase 1, Phase 2, and Phase 3 would exceed the SCAQMD NOx threshold for construction emissions and peak daily emissions in Phase 2 would exceed the SCAQMD VOC, CO, and $PM_{2.5}$ thresholds for construction emissions. Emissions of all other criteria pollutants would not exceed SCAQMD thresholds in any phase.

Table 6-15: Peak Daily Emissions Associated with Alternative 6 - No Project Construction Activities – 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	13	49	130	<1	6	5
Civil Construction	12	49	113	<1	8	6
Additional Demolition	12	57	95	<1	23	5
Peak Daily Phase 1 Impact[b,d]	*36*	*156*	***338***	*<1*	*37*	*15*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	13	49	126	<1	6	5
Civil Construction	147	575	1,702	2	129	83
Building Demolition	2	12	18	<1	1	1
Peak Daily Phase 2 Impact[b,d]	***162***	***636***	***1,847***	*2*	*136*	***89***
Thresholds	75	550	100	150	150	55
Significant?	**Yes**	**Yes**	**Yes**	No	No	**Yes**
Phase 3 Construction						
Civil Construction	39	154	429	1	33	21
Building Demolition	3	13	18	<1	1	1
Dredge Material Hauling	14	55	167	<1	13	8
Peak Daily Phase 3 Impact[b,d]	*55*	*222*	***614***	*1*	*47*	*30*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.

[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.

[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

Mitigation Measure **MM AQ-1 through MM AQ-6** would be applied to this alternative, as some construction activity would occur in order to bring the site back to its original condition. As shown in Table 6-16, after mitigation, construction emissions would remain significant for NOx under all three phases.

Table 6-16: Peak Daily Emissions Associated with Alternative 6 - No Project Construction Activities – With 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	11	55	132	<1	6	5
Civil Construction	3	31	38	<1	3	2
Building Demolition	2	12	17	<1	1	1
Additional Building Demolitoin	12	57	95	<1	23	5
Peak Daily Phase 1 Impact[b,d]	*28*	*155*	***282***	*<1*	*33*	*13*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 2 Construction						
Marine Construction	12	49	125	<1	6	5
Civil Construction	36	198	527	2	62	20
Building Demolition	2	12	17	<1	1	1
Peak Daily Phase 2 Impact[b,d]	*50*	*259*	***669***	*2*	*68*	*26*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No
Phase 3 Construction						
Civil Construction	5	56	86	<1	7	4
Dredge Material Hauling	14	55	167	<1	13	8
Peak Daily Phase 3 Impact[b,d]	*19*	*112*	***253***	*<1*	*19*	*12*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.
[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

Ambient air concentrations would be anticipated to be greater than for the proposed Project, because peak short-term emissions in all three phases would be greater than those estimated for the proposed Project. Therefore ambient air concentrations of 1-hour NO_2, and 24-hour PM_{10} and $PM_{2.5}$ would be significant and unavoidable.

Operation

Operational air quality impacts would be completely eliminated when compared to the proposed Project because the site would be completely cleared of structures and employees. As a result, Alternative 6 operational emissions would be less than the baseline and there would be no impacts.

Health Risk

While no operational impacts would occur under Alternative 6, demolition and dredging activities would take place. More construction emissions are anticipated from Alterative 6 than the proposed Project due to the additional work needed to return the existing ALBS site to its original condition. Thus, it is anticipated that significant residential cancer risk and significant residential and occupational acute hazard index impacts would still occur. While mitigation would reduce impacts, health risk impacts would remain significant and unavoidable for construction activities.

Greenhouse Gas Emissions

Under this alternative, the site would be completely cleared of structures and employees. As a result, GHG emissions would be reduced as compared to the proposed Project. However, construction activities would generate GHG emissions greater than the baseline. It is anticipated that the reduction in operational emissions would be greater than the short-term increase in construction emissions; therefore GHG emissions for this alternative would be less than significant.

6.3.2.1.8 Alternative 7 – No Federal Action

Construction

Table 6-17 presents the maximum daily criteria pollutant emissions associated with construction of the No Federal Action alternative, before mitigation. Construction impacts under this alternative would be related to landside improvements proposed under the proposed Project. These landside improvements include redirecting stormwater away from Fish Harbor to an oil/water separator, the demolition of the two potentially historic structures, construction of the new building, and infrastructure upgrades on the site related to paving, lighting, and utilities.

However, because demolition and grading would still occur, peak daily emissions would exceed the SCAQMD NOx threshold for construction emissions. Emissions of all other criteria pollutants would not exceed SCAQMD thresholds.

Table 6-17: Peak Daily Emissions Associated with Alternative 7 - No Federal Action Construction Activities – 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						
Civil Construction	29	114	285	<1	21	14
Building Demolition	16	73	126	<1	8	6
Peak Daily Phase 1 Impact[b,d]	*45*	*187*	***411***	*1*	*29*	*21*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.
[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

To reduce the level of impact during construction Mitigation Measures **MM AQ-1 through MM AQ-6** would be applied. Table 6-18 presents the maximum daily criteria pollutant emissions associated with construction of the Alternative 7, after the application of Mitigation Measures **MM AQ-1 through MM AQ-6**. After mitigation, construction emissions of NOx would remain significant and unavoidable. Overall, this alternative would result in fewer emissions than the proposed Project; however, impacts under this alternative would remain significant and unavoidable for NOx.

Table 6-18: Peak Daily Emissions Associated with Alternative 7 - No Federal Action Construction Activities –With 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						
Civil Construction	9	47	77	<1	5	4
Building Demolition	12	72	117	<1	7	6
Peak Daily Phase 1 Impact[b,d]	*21*	*119*	***194***	*<1*	*13*	*10*
Thresholds	75	550	100	150	150	55
Significant?	No	No	**Yes**	No	No	No

[a]Emissions of PM_{10} and $PM_{2.5}$ assume that fugitive dust is controlled in accordance with SCAQMD Rule 403 by watering disturbed areas 3 times per day.
[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. Future studies might use updated data, assumptions, and emission factors that are not currently available.
[d]The impact equals total Project construction emissions minus baseline construction emissions (which are zero).

Ambient air concentrations resulting from Alternative 7 construction activities are anticipated to be significant and unavoidable for 1-hour NO_2 and 24-hour PM_{10} and $PM_{2.5}$ based off the emissions of peak daily NOx, PM_{10} and $PM_{2.5}$ for the proposed Project (Tables 3.2-12 and 3.2-13) relative to the emissions in Tables 6-17 and 6-18 for Alternative 7.

Operation

There would be no increase in operational emissions under Alternative 1. The new 600- and 100-ton boat hoists would not be installed, therefore the capacity of the boat shop would remain the same, and the number and size of boats repaired would not be expected to increase under this alternative. As a result, impacts under this alternative would be less than significant. This impact would result in less operational emissions than the proposed Project.

Health Risk

Health risk impacts under Alternative 7 are anticipated to be less than significant for all receptor types due to the reduced construction impacts (specifically no dredging) and removal of boat shop operations.

Greenhouse Gas Emissions

Emissions from Alternative 7 operations would be identical to the existing boat shop; therefore, the impact for all GHGs would be zero. However GHG emissions would be greater than the baseline for Alternative 7 construction activities, even after application of Mitigation Measures **MM AQ-1 through MM AQ-6**. Therefore GHG impacts under this impact would significant and unavoidable.

6.3.2.2 Cultural Resources

6.3.2.2.1 Proposed Project

Archaeology and Paleontology

Excavation, trenching, and pile driving, as well as other ground-disturbing actions, have the potential to damage or destroy archaeological and paleontological resources within the proposed Project area; however, the proposed Project site has a low potential to disturb, damage, or degrade unknown archaeological, ethnographic, and paleontological resources. Implementation of Mitigation Measures **MM CUL-1** would further reduce impacts on unknown archaeological resources. Therefore, a significant impact is not anticipated under the proposed Project, nor any of the alternatives.

Historical Buildings

The proposed Project includes demolition of multiple buildings on the Project site, of which three (Buildings A2, A3, and C1) are eligible for listing in the California Register and potentially for listing as a City of Los Angeles Historic Cultural Monument (HCM). Buildings A2 and A3 are part of the Office and Workshop Complex that is comprised of three buildings are eligible for listing in the California Register of Historical Resources under Criterion 1, for its contribution to influencing patterns significant in our past. The Office and Workshop Buildings at the ALBS are significant for its association with the development of the Los Angeles shipbuilding and fishing industries between 1924 and 1959. Because all three of the buildings associated with the complex quality as a

historical resource as defined by CEQA and may qualify for listing as a City of Los Angeles HCM, their removal would represent a significant impact to an historic resource.

In addition to the three buildings that comprise the Office and Workshop Complex, Project construction would also demolish one of two buildings that comprise the Machine Shop Complex (Building C1). Both buildings that comprise the Machine Shop Complex are eligible for listing in the California Register of Historical Resources under Criterion 1, as they are 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 buildings quality as a historical resource as defined by CEQA and may qualify for listing as a City of Los Angeles HCM, demolition of Building C1 would result in a significant impact to an historic resource. Implementation of Mitigation Measures **MM CUL-2** and **MM CUL-3** would reduce project impacts on historic resources, but not to less than significant. Impacts on historic resources would remain significant and unavoidable.

6.3.2.2.2 Alternative 1 – Reduced Project: Water Quality Improvements

This alternative would not implement any of the proposed improvements on the Project site, other than those required to comply with the Los Angeles RWQCB requirements and remain in operation. These improvements include placing dikes around existing buildings and/or changing the slope of the site so stormwater runoff would drain away from Fish Harbor into an oil/water separator before discharge.

As compared to the proposed Project, this alternative would reduce the amount of development on the site. This alternative would reduce the amount of construction materials, construction vehicle emission, earthwork, grading, and construction noise. None of the potentially historic buildings would be impacted under this alternative and, thus, impacts under this alternative would be less than under the proposed Project. Impacts to cultural resources would be less than significant under this alternative.

6.3.2.2.3 Alternative 2 – Reduced Project: Limited Demolition

This alternative is similar to the proposed Project; however, only some of the potentially historic structures (Buildings A2 and A3 of the Office/Workshop Complex and Building C1 of the Machine Shop Complex) would be demolished. With the exception of the construction of the new building, all other components of the proposed Project would be implemented. Implementation of this alternative would not result in the complete modernization of the facility, as some of the potentially historic structures would remain on the site. It would also not result in a full clean up of landside legacy contaminants, as all of the buildings would not be demolished.

Under this alternative, the impact on operations would differ with the choice of which buildings would be retained; however, the ALBS facility would not achieve the modernization and expansion to the extent planned under the proposed Project.

The amount of development would be reduced under this alternative, as some of historic structures on the site would remain. As a result, impacts on historic resources would be reduced under this alternative. However, the partial removal of any portion of either the Office/Workshop Complex or the Machine Shop Complex would result in a loss of integrity to the complex as a whole and, thus, a significant and unavoidable impact.

The implementation of Mitigation Measure **MM CUL-2** and **MM CUL-3** would still apply to this alternative, as only some of the historic buildings would be demolished and other construction activities would have the potential to impact the structures. As with the proposed Project, implementation of mitigation would reduce Project impacts, but not to a level of less than significant. Impacts on historic resources would remain significant and unavoidable under this alternative.

6.3.2.2.4 Alternative 3 – Retention of Historic Buildings

This alternative would contain most of the elements of the proposed Project. The potentially historic buildings (Buildings A2 and A3 of the Office/Workshop Complex and Building C1 of the Machine Shop Complex) would not be demolished and the new building would not be constructed. Implementation of this alternative would not result in the complete modernization of the facility.

Under this alternative, the amount of development would be reduced as the two historic complexes on the site would remain. As a result, impacts to historic resources would be eliminated under this alternative. Therefore, impacts to cultural resources would be reduced to less than significant.

6.3.2.2.5 Alternative 4 –Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, LAHD would relocate the three potentially historic buildings slated for demolition 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. All of the components of the proposed Project would be constructed under this alternative.

Under this alternative, instead of demolishing the potentially historic buildings on the site, the buildings would be relocated to another site within the Harbor. Because the potentially historic buildings would be relocated elsewhere within the Port, the potential impact area would expand beyond the existing Project site.

In addition, relocation of the buildings could lead to a loss of integrity of the structure. As a result, this alternative would not eliminate the project impacts to historic resources. Implementation of Mitigation Measures **MM CUL-2** and **MM CUL-3** would still apply to this alternative. However, the implementation of mitigation would not fully mitigate impacts to less than significant. Impacts under this alternative would remain significant and unavoidable.

6.3.2.2.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites. Three of the four sites contain historic buildings.

All four sites are developed to varying degrees and three of the four sites currently contain historic resources that would have to be demolished to make room for ALBS operations.

Mitigation Measures **MM CUL-2** and **MM CUL-3**would be applicable to this alternative to document the potentially historic structures on the ALBS site, as well as the historic structures on three of the four alternate sites (only one site could be affected). Mitigation would not reduce impacts to less than significant under this alternative, as resources on both the ALBS and on the alternate sites could be impacted under this alternative. Removal of the potentially historic resources on three of the alternate sites could result in an additional significant impact. Impacts under this alternative would remain significant and unavoidable. Impacts under this alternative would be greater than those under the proposed Project.

6.3.2.2.7 Alternative 6 – No Project

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. As a result, operation of ALBS would cease and the site would be cleared of all structures, including the removal of the historic structures, to return the site to pre-lease conditions. The removal of these structures would be considered significant.

Mitigation Measures **MM CUL-2** and **MM CUL-3** would apply to this alternative. Impacts under this alternative would be similar to the proposed Project in that the potentially historic structures would be demolished in both scenarios, however, all historic structures would be removed under this alternative as compared to the proposed Project where two potentially historic structures would be retained on-site. Impacts on historic resources would remain significant and unavoidable under this alternative.

6.3.2.2.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the site because only the landside construction would occur. No dredging, CDF construction or construction of the concrete piers for the 600- and 100-ton boat hoists would occur under this alternative.

Under this alternative, the landside improvements would occur, including the demolition of both potentially historic structures. These improvements include upgrading existing facilities as well as the implementation of improvements that would bring the facility into compliance with the NPDES stormwater requirements. Mitigation Measures **MM CUL-2** and **MM CUL-3** would still apply to this alternative. However, the implementation of mitigation would not fully mitigate impacts to historic resources to less than significant. Impacts under this alternative would remain significant and unavoidable and would be similar to those under the proposed Project.

6.3.2.3 Noise

6.3.2.3.1 Proposed Project

Construction

Construction activities would typically last more than 10 days in any 3-month period. Based on the thresholds of significance, an impact would be considered significant if noise from these construction activities would exceed existing ambient exterior noise levels by 5 dBA or more at noise-sensitive use.

The proposed Project would result in a significant noise impact during construction. The noise level is projected to temporarily exceed ambient levels by more than 5 dBA to noise sensitive uses at Al Larson Marina (Fish Harbor) and Reservation Point. Noise from pile driving would be audible and may be perceived as intrusive or annoying by the community at the Al Larson Marina and Reservation Point. However, the potential for construction noise impacts is well below the threshold for residences and hotels along Harbor Boulevard in San Pedro, the other identified sensitive receptors in the vicinity.

Implementation of Mitigation Measures **MM NOI-1 through MM NOI-3** would not reduce impacts resulting from construction noise on noise sensitive uses at Al Larson Marina to a level of less than significant. Construction related noise impacts would remain significant and unavoidable.

Operation

Operational activities at the ALBS site would not generate noise increases greater than 3 dBA. Given that the types of equipment and operations planned for the proposed Project is similar what is currently existing uses at the site, noise increases at noise sensitive receptors is expected to be imperceptible. Therefore, operation of the proposed Project would not result in significant impacts to noise sensitive uses in the Port area.

6.3.2.3.2 Alternative 1 – Reduced Project: Water Quality Improvements

This alternative would significantly decrease the amount of development on the site by eliminating all of the proposed improvements with the exception of those that would ensure compliance with the Los Angeles RWQCB requirements to remain in operation. Under this alternative, the majority of the construction noise would be eliminated. No demolition would occur on the site. In addition, the new wharf would not be constructed, and the two boat hoists would not be installed. No additional employees would be added and no increase in the number of vessels served would occur. As a result, the significant and unavoidable impact due to pile driving would be eliminated. No significant and unavoidable impacts would occur under this alternative. Impacts related to this alternative would be less than significant.

6.3.2.3.3 Alternative 2 – Reduced Project: Limited Demolition

This alternative would decrease the amount of new development on the site, as the new building would not be constructed. The amount of demolition would decrease, as well, as only some of the potentially historic structures would be demolished. Because most of the Project components would be constructed/implemented, some of the proposed operational increases would occur, including the proposed increase in the number of ships serviced at the site and the proposed increase in employees, although at a lesser degree than under the proposed Project.

Although construction noise would be slightly reduced under this alternative, pile driving would still occur in conjunction with construction of the new wharf to support the 600- and 100-ton boat hoists. Mitigation Measures **MM NOI-1 through MM NOI-3** would apply to this alternative. These mitigation measures would reduce construction noise impacts related to pile driving and noise attenuation. However, these mitigation measures would not reduce impacts to less than significant. As a result, like the proposed Project, this alternative would result in a significant and unavoidable impact.

6.3.2.3.4 Alternative 3 – Retention of Historic Buildings

This alternative would slightly decrease the amount of new development on the site, as all proposed Project components would be constructed on the site except for the new building. However, because the existing historic buildings would not be demolished or relocated, implementation of this alternative would neither result in the complete modernization of the existing boat yard facilities nor provide for the same level of operational efficiency that would occur under the proposed Project

Under this alternative, none of the potentially historic structures on the site would be demolished. As a result, the amount of noise produced as a result of construction activities would be slightly less than the proposed Project due to the decreased amount of demolition.

Although construction noise would be slightly reduced under this alternative, pile driving would still occur in conjunction with construction of the new finger piers to support the 600- and 100-ton boat hoists. Mitigation Measures **MM NOI-1 through MM NOI-3** would apply to this alternative. These mitigation measures would reduce construction noise impacts related to pile driving and noise attenuation. However, these mitigation measures would not reduce impacts to less than significant. As a result, like the proposed Project, this alternative would result in a significant and unavoidable impact during construction.

6.3.2.3.5 Alternative 4 – Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, all of the potentially historic buildings slated for demolition would be located 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. All of the components of the proposed Project would be constructed under this alternative, as both buildings would be removed from the site. Under this alternative, noise impacts would occur beyond the boundaries of the existing ALBS site.

Because all of the Project components would be constructed on the site, operational impacts would be the same as the proposed Project.

Under this alternative, instead of demolishing three of the potentially historic buildings on the site, they would be relocated to another site within the Harbor. Because the historic buildings would potentially be relocated elsewhere within the Port, the potential impact area would expand beyond the existing Project site. Noise related to the relocation of one or both of the potentially historic structures would occur on the Project site, along the relocation route, and at the relocation site.

Impacts due to construction noise would be slightly greater when compared to the proposed Project because one or two of the historic buildings would be relocated, which is an additional component that would occur as part of the construction phase of the project. Mitigation Measures **MM NOI-1 through MM NOI-3** would apply to this alternative. Mitigation would reduce construction noise impacts related to pile driving and noise attenuation. However, these mitigation measures would not reduce impacts to less than significant. As with the proposed Project, construction noise impacts would remain significant and unavoidable.

6.3.2.3.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located within Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites.

This alternative would have operational impacts that are similar to the proposed Project, as ALBS would attempt to operate at the same levels as under the proposed Project.

Construction impacts under this alternative would be much greater than the proposed Project. All Project components would be constructed on an alternate site that is the same size as the existing ALBS site. Pile driving would occur in conjunction with construction of a new wharf to support the 600- and 100-ton boat hoists. Mitigation Measures **MM NOI-1** and **MM NOI-2** would apply all four alternate sites. Even with the inclusion of the mitigation measures, noise impacts related to pile driving would remain significant and unavoidable. As a result, this alternative would result in a significant and unavoidable construction noise impacts, similar to the proposed Project.

Three of the alternate sites are in close proximity to the ALBS site. Two of the alternate sites are in Fish Harbor (across Fish Harbor to the east of the ALBS site. These sites are further from all of the noise sensitive uses at Al Larson Marina and Reservation Point. No additional sensitive uses are located in close proximity to these two sites. As a result, both construction and operational noise impacts would be less at these two alternate sites than the proposed Project. In this case, both of these sites are located over 500 feet from the nearest sensitive use; therefore, Mitigation Measure MM NOI-3 would not apply to these sites.

The third alternate site is located west of Seaside Avenue with vessel access to the Main Channel. This site is located just to the west of the ALBS site, and is within 500 feet of the Al Larson Marina. No additional noise sensitive uses are located in close proximity to this site. Therefore, Mitigation Measure **MM NOI-3** would apply to this alternate site.

The fourth alternate site is located on the mainland, off the East Basin. The California Yacht Marina, which is the only noise sensitive use located within close proximity to this site, is located less than 500 feet to the east of this alternate site. Therefore, Mitigation Measure **MM NOI-3** would apply to this alternate site.

Each of the alternate sites is developed at different levels. It is likely that buildings on each of the alternate sites would have to be demolished. In addition, all of the remaining non-historic buildings on the existing ALBS site would have to be demolished to return the site to its pre-lease conditions. The construction process would be much more involved and would occur at two different locations under this alternative, making noise impacts under this alternative much greater than the proposed Project.

6.3.2.3.7 Alternative 6 – No Project

Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no improvements would occur, including the required water quality improvements, ALBS could not continue to operate and the boat shop would close. Under this scenario, ALBS would be required to clear the site and return it to its original condition.

The No Project Alternative would not implement any of the proposed Project components, and all operation on the site would cease. As a result, there would be no operational noise increase on the site. Under this alternative, all operational noise would completely cease to exist.

No additional construction noise would be generated due to the construction of components associated with the proposed Project. However, construction noise would be generated by clearing the site of the existing operations and dredging of the contaminated sediments. No pile driving would occur under this alternative. As a result, construction noise impacts would be less than significant. Overall construction levels under this alternative would be less than the proposed Project.

6.3.2.3.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the Project site because only the landside construction would occur under this alternative. No dredging, CDF construction, or construction of the concrete piers for the new 600- and 100-ton boat hoists would occur under this alternative.

Improvements would be made that would bring the operation into compliance with the NPDES stormwater requirements. As a result, ALBS would be able to enter into a new 30-year lease.

Under this alternative, the dredging and installation of the 600- and 100-ton boat hoists would not occur, which would result in onsite operation levels similar to existing operations. No new employees would be added and an increase in the number and size of vessels serviced would not occur. As a result, operational noise impacts would be less than the proposed Project. Operational noise impacts would be less than significant.

Under this alternative, the landside aging infrastructure would be improved, including the replacement of paving, lighting, and utilities. The potentially historic structures would also be removed and the new building would be constructed under this alternative.

Because only landside project components would occur under this alternative, no pile driving would occur. As a result, construction noise impacts would be less than significant. Construction noise levels would be substantially less under this alternative due to the restricted nature of the project components being implemented under this alternative.

6.3.3 Resources with Significant Impacts that Can be Mitigated to Less than Significant

As noted above, one resource area - Biological Resources - has potentially significant impacts that can be mitigated to a less than significant level, as analyzed in Chapter 3 for the proposed Project and following is a qualitative analysis for each alternative:

6.3.3.1 Biological Resources

6.3.3.1.1 Proposed Project

Biological communities, the collection of species inhabiting a particular habitat or ecosystem, can potentially be disrupted by changes in environmental conditions that favor a different assemblage of species, or alter the dynamics among species that make up a biological community. The significance of changes in local conditions depends on the extent and duration of those changes, as well as the species or groups of species affected. The terrestrial portions of the Project site are developed, and the only plant life at the Project site is a few trees; therefore, impacts on terrestrial biological communities would be very limited. Construction-related impacts on marine biological communities are expected to be temporary, lasting through the construction period and for a short time thereafter. These include physical disturbance, underwater and overwater noise, and turbidity produced during dredging/disposal activities, pile driving and removal, and other subtidal construction (such as installation of the sealed sheet pile bulkheads).

Construction of the proposed Project includes fill (disposal of sediment to create the CDFs) that would result in the direct loss of approximately 0.9 acres of marine habitat in Fish Harbor. Even though the area proposed for construction of the CDFs is considered "impacted" due to the presence of contaminated sediments, it is still considered EFH for the Coastal Pelagics and Pacific Groundfish.

While disturbance to biological communities is expected during project construction and operation, most impacts are limited in scope and duration. The construction of the proposed Project would not cause a loss of individuals or habitat of a state- or federally-listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or the loss of federally listed critical habitat. The implementation of Mitigation Measure **MM BIO-1** would reduce Project impacts to less than significant.

6.3.3.1.2 Alternative 1 – Reduced Project: Water Quality Improvements

This alternative would not implement any of the proposed improvements on the Project site, other than those required to comply with the Los Angeles RWQCB requirements and remain in operation. These improvements include placing dikes around existing buildings and/or changing the slope of the site so stormwater runoff would drain away from Fish Harbor into an oil/water separator before discharge.

As compared to the proposed Project, this alternative would reduce the amount of development on the site by not demolishing/relocating and reconstructing any buildings on the Project site. This alternative would reduce the amount of construction materials, construction vehicle emission, earthwork, and grading.

Because this alternative would result in a much smaller project and would be confined to landside improvements, impacts on biological resources would be less than those under the proposed Project. Under this alternative, impacts on biological resources would be less than significant.

6.3.3.1.3 Alternative 2 – Reduced Project: Limited Demolition

This alternative is similar to the proposed Project; however, only some of the potentially historic structures associated with the Office/Workshop and/or Machine Shop complexes would be demolished and all other Project components would be constructed with the exception of the new building. As compared to the proposed Project, this alternative would slightly reduce the overall amount of development on the site by demolishing fewer structures.

Because the majority of the components associated with the proposed Project would be constructed, impacts on biological resources would be similar to the proposed Project. Therefore, implementation of Mitigation Measure **MM BIO-1** would reduce impacts on marine habitat to less than significant levels. Impacts from this alternative would be the same as the proposed Project's, and would be less than significant after mitigation.

6.3.3.1.4 Alternative 3 – Retention of Historic Buildings

This alternative would contain the majority of the components of the proposed Project. Under this alternative, the potentially historic buildings (Buildings C1, A2, or A3) would not be demolished and the new building would not be constructed. As compared to the proposed Project, this alternative would slightly reduce the amount of development on the site by not demolishing/relocating either of the potentially historic buildings on the site.

Because all of the other components associated with the proposed Project would be constructed, except for the new building, impacts would be the same as the proposed Project. Therefore, implementation of Mitigation Measure **MM BIO-1** would reduce impacts on marine habitat to less than significant levels. Impacts from this alternative would be the same as the proposed Project's, and would be less than significant after mitigation.

6.3.3.1.5 Alternative 4 –Relocation of Historic Buildings

This alternative would be the same as the proposed Project except that all of the potentially historic buildings slated for demolition would be relocated 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. All of the components of the proposed Project would be constructed under this alternative, as both buildings would be removed from the site.

Under this alternative, instead of demolishing one or both of the potentially historic buildings on the site, one or both buildings would be relocated to another site within the Harbor. If only one building is relocated, the other would be demolished. Because one or two of the buildings would potentially be relocated elsewhere within the Port, the potential impact area would expand beyond the existing Project site. However, the buildings would be relocated to one of two sites that are completely developed and, thus, would not impact any biological resources.

As with the proposed Project, implementation of Mitigation Measure **MM BIO-1** would reduce impacts on marine habitat to less than significant levels. Impacts from this alternative would be the same as the proposed Project's, and would be less than significant after mitigation.

6.3.3.1.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites. Dredging would occur at the existing site; however, no CDFs would be created.

All four sites are developed to varying degrees and do not contain any significant biological resources, as allowed by the constraints of the alternate site. As a result, impact to biological resources would be similar to the proposed Project. Implementation of Mitigation Measure **MM BIO-1** would be applicable to this alternative and implementation of this mitigation measure would result in a less than significant impact.

6.3.3.1.7 Alternative 6 – No Project

Under this alternative, no improvements 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. As a result, operation of ALBS would cease and the site would be cleared of all structures. Because the site would be cleared, operational impacts on biological resources would not occur. Some construction impacts could occur during the construction process as the site is cleared and the contaminated sediments in Fish Harbor are dredged, but these impacts would not be any greater than under the proposed Project. Overall, biological impacts would be slightly less under this alternative than the proposed Project, due to the cease in operations.

6.3.3.1.8 Alternative 7 – No Federal Action

This alternative would involve the implementation of only the landside Project components. None of the Project components that would require a USACE Permit (i.e., all Project components that occur within the water) would be constructed.

The overall amount of development of this alternative would be much smaller than the proposed Project, and Project impacts would be much less than the proposed Project. Because this alternative would not impact the marine environment, no impacts to biological resources would occur.

6.3.4 Resources with Less than Significant Impacts

As noted above, the remaining nine environmental resources (Aesthetics and Visual Resources, Geology, Groundwater and Soils, Hazards and Hazardous Materials, Land Use, Population and Housing, Public Services and Utilities, Traffic and Transportation, and Water Quality, Sediments, and Oceanography) have no potentially significant impacts associated, as analyzed in Chapter 3 for the proposed Project and following is a qualitative analysis for each alternative:

6.3.4.1 Aesthetics and Visual Resources

6.3.4.1.1 Proposed Project

The ALBS site is a flat 7.70-acre parcel located within Fish Harbor in the larger Port of Los Angeles. The boatyard is comprised of aging infrastructure, such as the existing boat docks, piers, marine railways, a floating dry dock, and a number of structures. The facilities on the site are generally dilapidated and in need of improvement.

The Key Observation Points (KOPs) for visual impact analysis generally encompasses the following: 1) Fish Harbor and the surrounding areas (KOP-1); 2) the Ports O'Call Village commercial and recreational area (KOP-2); 3) Harbor Boulevard/Harbor Scenic Route (KOP-3); 4) residential areas of San Pedro (KOP-4); and, 5) San Pedro Bluffs and Friendship Park (KOP-5). Refer to Figure 3.1-3 for the location of the five KOPs.

Improvements on the site would be in keeping with the aesthetic character and quality of the site from key observation points, and sensitive viewer groups. Viewer groups may include two liveaboards (people living on their boats) within the Al Larson Marina, tourists, recreationists within the Harbor, boaters using the Harbor, commuting motorists, and workers within the Port.

Implementation of the proposed Project that would alter the aesthetic character and quality on the site would involve the construction and installation of new 600- and 100-ton boat hoists (these would be approximately 53 and 32 feet in height, respectively) at the dry dock pier along the north end of the Project site, the demolition of several buildings to create the necessary turning radius for the boat hoists, the construction of a new 2,400 square foot building, various water quality improvements, and various infrastructure improvements such as installation of lighting and high-strength pavement.

The visual changes that would result from implementation of the proposed Project would occur within the Port Complex, and would be similar to views of the existing ALBS and adjacent operations. Development in this area over the course of the past century, such as the construction of breakwaters, dredging of harbor waters, creation of landfills for use as terminals and berths, and construction of the required infrastructure needed to support Port operations have completely transformed the original natural setting, into a highly engineered landscape that is visually dominated by large-scale man-made features. As a result, the visual impacts would be less than significant.

6.3.4.1.2 Alternative 1 – Reduced Project: Water Quality Improvements

Alternative 1 would reduce the amount of visual changes that would occur on the site in comparison to the proposed Project, as this alternative would not implement any of the proposed improvements on the site with the exception of implementation of measures to comply with Los Angeles RWQCB requirements. Improvements associated with Los Angeles RWQCB requirements include either placing dikes around the existing buildings and/or changing the slope of the site to drain away from Fish Harbor. Under this alternative, very few changes to the site would occur. No demolition of existing structures would occur, no new building would be added to the site, and the new boat hoists would not be installed. The site would remain visually similar to its current condition. While the visual changes would be less under Alternative 1, the character and quality of site would continue to be that of a working boat shop under both Alternative 1 and the proposed Project. As a result, the visual impacts under this alternative would be similar, although reduced, as compared to the proposed Project and, therefore, less than significant.

6.3.4.1.3 Alternative 2 – Reduced Project: Limited Demolition

Alternative 2 would reduce the total amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, unlike the proposed Project only some of the three potentially historic structures (Buildings C1, A2, or A3) would be demolished. In addition, the new building would not be constructed under this alternative. All of the other Project components would be the same as the proposed Project. Under this alternative, there would be slightly less demolition and the new building would not be constructed. Should the 600- and/or 100-ton boat hoists be installed at the site, these would be approximately 54 or 35 feet in height, respectively. As a result, the visual impacts under this alternative would be similar to, although slightly reduced, as compared to the proposed Project and, therefore, less than significant.

6.3.4.1.4 Alternative 3 - Retention of Historic Buildings

This alternative would reduce the overall amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, the potentially historic buildings (Buildings C1, A2, or A3) would not be demolished. In addition, the new building would not be constructed on the site. All of the other Project components would be the same as the proposed Project. However, because the existing historic buildings would not be demolished or relocated, implementation of this alternative would neither result in the complete modernization of the existing boat yard facilities nor provide for the same level of operational efficiency that would occur under the proposed Project. Under this alternative, there would be slightly less demolition, as all of the historic structures would be retained, and the new structure would not be constructed. Though the use would be restricted as compared to the proposed Project, the 600- and/or 100-ton boat hoists would be installed at the site (these would be approximately 54 or 35 feet in height, respectively). As a result, the visual impacts under this alternative would be similar to the proposed Project and, therefore, less than significant.

6.3.4.1.5 Alternative 4 – Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, LAHD would relocate all of the potentially historic buildings slated for demolition 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. All of the components of the proposed Project would be constructed under this alternative, as both buildings would be removed from the site. Under this alternative, impacts would occur beyond the boundaries of the existing ALBS site.

Under this alternative, visual impacts on the proposed Project site would be the same as under the proposed Project, as all of the components of the proposed Project would occur under this alternative. Because visual impacts under the proposed Project are less than significant, they would remain less than significant under this alternative as well.

However, under this alternative, the historic structures would be relocated to one of two redevelopment project sites within the Port. Relocation of the structures to either of the redevelopment project sites would be consistent with the Port's *"Guide to Leasing and Development for the Port of Los Angeles"*, which incorporates long-range facility planning and objectives in the two redevelopment project areas. The Guide includes plans and objectives to that would be considered when relocating the structures, including maximizing the value of public use areas to the community. It is assumed that through

this process the structures would be located amongst compatible Port-related and visitor serving uses and would not result in a significant aesthetic impact to the surrounding viewpoints or viewer groups. The relocation would take into account the "*LA Waterfront Design Guidelines*," which provides a framework for addressing development along the Los Angeles Waterfront (which includes the San Pedro and Wilmington waterfront project areas). The design guidelines bring together open space, architectural design, signage, lighting, and sustainability guidelines for the unified development of the Los Angeles Waterfront, while also connecting with the unique history and visions of San Pedro and Wilmington (POLA, 2011). In particular, not all of the sub-areas in the design guidelines could accommodate, for various reasons, the buildings being relocated (i.e., sub-areas W3, 2, and 4). However, relocation would occur consistent with the Guide and Design Guidelines; therefore, this alternative would remain less than significant.

6.3.4.1.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites.

Under this alternative, all facilities within the existing ALBS site would be removed and relocated to one of four alternate sites. As a result, the visual character of the Project site would change from a working boat facility to vacant land. The Project site is located within the working port and the visibility of the site to sensitive viewers is generally limited to the immediate area and the visual change would cause no unfavorable or additional contrast with features associated with the valued aesthetic image of the area. Further, there are other vacant lots located on Terminal Island and thus this change in visual character would not create an aesthetic discontinuity with the surrounding Terminal Island viewscape.

Relocation of the ALBS facilities to one of four alternative sites would result in visual impacts beyond the existing ALBS site. However, each of these sites are located within the Port and are far enough from residential or other sensitive viewers that a significant impact would not occur. This alternative would remain less than significant.

6.3.4.1.7 Alternative 6 – No Project

Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no development would occur, including the required improvements, ALBS would to cease operation on the site. Under this scenario, ALBS would be required to clear the site and return it to its original condition. As discussed for Alternative 5, under Alternative 6 the visual character of the Project site would change from a working boat facility to vacant land. The Project site is located within the working port and the visibility of the site to sensitive viewers is generally limited to the immediate area and the visual change would cause no unfavorable or additional contrast with features associated with the valued aesthetic image of the area. Further, there are other vacant lots located on Terminal Island and thus this change in visual character

would not create an aesthetic discontinuity with the surrounding Terminal Island viewscape.

6.3.4.1.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the Project site because only the landside construction would occur under this alternative. No maintenance dredging, CDF construction or construction of the concrete piers for the proposed 600- and 100-ton boat hoists would occur under this alternative.

Improvements would be made that would bring the operation into compliance with the NPDES stormwater requirements. As a result, ALBS would be able to enter into a new 30-year lease.

In addition, the landside aging infrastructure would be improved, including the replacement of paving, lighting, and utilities. The potentially historic structures would also be removed under this alternative.

Under this alternative, the total overall amount of development on the site would be reduced as compared to the proposed Project. As a result, this impact would remain less than significant.

6.3.4.2 Geology

6.3.4.2.1 Proposed Project

Seismic activity along the Palos Verdes Fault zone, or other regional faults, would potentially produce fault rupture, seismic ground shaking, liquefaction, or other seismically induced ground failure. Seismic hazards are common to the Los Angeles region and would not be increased by the proposed Project. The Project site lies approximately 1,600 feet to the west of the Palos Verdes fault. Construction would occur over a three year period and increased exposure of people and property during construction to seismic hazards from a major or great earthquake cannot be precluded. Because active faults are located near the Project area, and the area is mapped within an area of historic liquefaction, there is a potential for substantial risk of seismic impacts and subsequent potential to contribute to seismically induced ground shaking that could result in injury to people and damage to structures, because of the increase in the amount of structures and people working at the Project site, and therefore the Port. However, incorporation of modern construction engineering and safety standards and compliance with current building regulations, impacts due to seismically induced ground failure would be less than significant.

In addition, exposures of people or property to tsunami risks are minimal due to the remote nature of the tsunamis in the Project area and the relative low water levels associated with the worst-case faulting scenario, which predicted shoreline tsunami water level at Fish Harbor ranges from 3.9 to 5.2 feet above MSL. The Project site ranges in elevation from 10.1 feet above MSL (7.3 feet MLLW) along the timber wharf to approximately 14.8 feet MSL (12 feet above MLLW) in the upland areas. Flood hazard maps prepared by researchers at the Pacific Institute suggest that sea level rise of 1.4 meters (55.11 inches or approximately 5 feet) would have some direct impact on the existing ALBS site and surroundings. Its predicted that over the next century sea level could rise as much as approximately 6 feet (69 inches) and over the ALBS 30-year lease term (and beyond - through 2050), sea levels are predicted to rise by 1.5 feet (17 inches) or less. This is not significant; therefore, as with the proposed Project, the site is not expected to be significantly impacted by sea level rise. Further, measures to minimize

impacts from seiches or tsunamis, such as the breakwater and constructing facilities at adequate elevation, are currently in place throughout the Port, which would also serve to limit the effects of sea level rise. Therefore, impacts would be less than significant.

6.3.4.2.2 Alternative 1 – Reduced Project: Water Quality Improvements

Alternative 1 would substantially reduce the amount of development on the site in comparison to the proposed Project, as this alternative would not implement any of the proposed improvements on the site with the exception of implementation of measures to comply with Los Angeles RWQCB requirements. Improvements associated with Los Angeles RWQCB requirements include either placing dikes around the existing buildings and/or changing the slope of the site to drain away from Fish Harbor.

This alternative would occur entirely within the existing Project site, which lies approximately 1,600 feet to the west of the Palos Verdes fault. As such, there is a risk of seismic impact such as fault rupture, seismic ground shaking, liquefaction, or other seismically induced ground failure. Under this alternative, construction would be relatively minor and fewer people would be exposed to geologic hazards compared with the proposed Project. In addition, exposures of people or property to tsunami risks are minimal due to the remote nature of the tsunamis in the Project area and the relative low water levels associated with the worst-case faulting scenario, which predicted shoreline tsunami water level at Fish Harbor ranges from 3.9 to 5.2 feet above MSL. The Project site ranges in elevation from 10.1 feet above MSL (7.3 feet MLLW) along the timber wharf to approximately 14.8 feet MSL (12 feet above MLLW) in the upland areas. Flood hazard maps prepared by researchers at the Pacific Institute suggest that sea level rise of 1.4 meters (55.11 inches or approximately 5 feet) would have some direct impact on the existing ALBS site and surroundings. Its predicted that over the next century sea level could rise as much as approximately 6 feet (69 inches) and over the ALBS 30-year lease term (and beyond - through 2050), sea levels are predicted to rise by 1.5 feet (17 inches) or less. This is not significant; therefore, as with the proposed Project, the site is not expected to be significantly impacted by sea level rise. Further, measures to minimize impacts from seiches or tsunamis, such as the breakwater and constructing facilities at adequate elevation, are currently in place throughout the Port, which would also serve to limit the effects of sea level rise. Therefore, impacts would be less than significant.

6.3.4.2.3 Alternative 2 – Reduced Project: Limited Demolition

Alternative 2 would reduce the total amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, unlike the proposed Project only some of the three potentially historic structures (Buildings C1, A2, or A3) would be demolished. In addition, the new building would not be constructed under this alternative. All of the other Project components would be the same as the proposed Project.

Because most of the Project components would be implemented, an additional 30 employees could be added to the site. Increased exposure of people to seismic hazards during operations cannot be precluded. Incorporation of modern construction engineering and safety standards and compliance with current building regulations, impacts due to seismically induced ground failure would be similar to the proposed Project and less than significant. In addition, exposures of people or property to tsunami risks are minimal due to the remote nature of the tsunamis in the Project area and the relative low water levels associated with the worst-case faulting scenario, which predicted shoreline tsunami water level at Fish Harbor ranges from 3.9 to 5.2 feet above MSL. The Project

site ranges in elevation from 10.1 feet above MSL (7.3 feet MLLW) along the timber wharf too approximately 14.8 feet MSL (12 feet above MLLW) in the upland areas. During the next 30 years, sea level rise at the Project site is predicted to rise by 1.5 feet (17 inches) or less. This is not significant; therefore, as with the proposed Project, the site is not expected to be significantly impacted by sea level rise. Further, measures to minimize impacts from seiches or tsunamis, such as the breakwater and constructing facilities at adequate elevation, are currently in place throughout the Port, which would also serve to limit the effects of sea level rise. As a result, this alternative would be less than significant.

6.3.4.2.4 Alternative 3 - Retention of Historic Buildings

This alternative would reduce the overall amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, the historic buildings (Buildings C1, A2, or A3) would not be demolished and the new building would not be constructed. All of the other Project components would be the same as the proposed Project. However, because the existing historic buildings would not be demolished or relocated, implementation of this alternative would neither result in the complete modernization of the existing boat yard facilities nor provide for the same level of operational efficiency that would occur under the proposed Project.

Because most of the Project components would be implemented, an additional 30 employees could be added to the site. Increased exposure of people to seismic hazards during operations cannot be precluded. When compared to the proposed Project, and incorporation of modern construction engineering and safety standards and compliance with current building regulations, impacts due to seismically induced ground failure would be less than significant. In addition, exposures of people or property to tsunami risks are minimal due to the remote nature of the tsunamis in the Project area and the relative low water levels associated with the worst-case faulting scenario, which predicted shoreline tsunami water level at Fish Harbor ranges from 3.9 to 5.2 feet above MSL. The Project site ranges in elevation from 10.1 feet above MSL (7.3 feet MLLW) along the timber wharf too approximately 14.8 feet MSL (12 feet above MLLW) in the upland areas. During the next 30 years, sea level rise at the Project site is predicted to rise by 1.5 feet (17 inches) or less. This is not significant; therefore, as with the proposed Project, the site is not expected to be significantly impacted by sea level rise. Further, measures to minimize impacts from seiches or tsunamis, such as the breakwater and constructing facilities at adequate elevation, are currently in place throughout the Port, which would also serve to limit the effects of sea level rise. As a result, this alternative would be less than significant.

6.3.4.2.5 Alternative 4 – Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, LAHD would relocate all of the potentially historic buildings slated for demolition 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. All of the components of the proposed Project would be constructed under this alternative, as both buildings would be removed from the site. Under this alternative, impacts would occur beyond the boundaries of the existing ALBS site.

The relocation sites are within the Port and are in the area of the Palos Verdes Fault zone. Because the Project components would be implemented, and an additional 30 employees would be added to the facility, this increased exposure of people to seismic hazards

cannot be precluded. When compared to the proposed Project, and incorporation of modern construction engineering and safety standards and compliance with current building regulations, impacts due to seismically induced ground failure would be less than significant. In addition, exposures of people or property to tsunami risks are minimal due to the remote nature of the tsunamis in the Project area and the relative low water levels associated with the worst-case faulting scenario, which predicted shoreline tsunami water level at Fish Harbor ranges from 3.9 to 5.2 feet above MSL. The Project site ranges in elevation from 10.1 feet above MSL (7.3 feet MLLW) along the timber wharf to approximately 14.8 feet MSL (12 feet above MLLW) in the upland areas. During the next 30 years, sea level rise at the Project site is predicted to rise by 1.5 feet (17 inches) or less. This is not significant; therefore, as with the proposed Project, the site is not expected to be significantly impacted by sea level rise. Further, measures to minimize impacts from seiches or tsunamis, such as the breakwater and constructing facilities at adequate elevation, are currently in place throughout the Port, which would also serve to limit the effects of sea level rise. As a result, this alternative would be less than significant.

6.3.4.2.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites.

Similar to the proposed Project, use of an alternate site within the Port Complex would result in a similar exposure of people during both operations and construction to seismic hazards such as seismic shaking, fault rupture, liquefaction, or other seismically induced ground failure. The alternate sites near the Project site (within Fish Harbor) are located a similar distance from the Palos Verdes Fault zone. The site along the Main Channel would be further from this fault but still in the general area. Because the Project components would be implemented at nearby sites, and an additional 30 employees would be added to the facility, this increased exposure of people to seismic hazards cannot be precluded. When compared to the proposed Project, and incorporation of modern construction engineering and safety standards and compliance with current building regulations, impacts due to seismically induced ground failure would be less than significant. In addition, exposures of people or property to tsunami risks are minimal due to the remote nature of the tsunamis in the Project area and the relative low water levels associated with the worst-case faulting scenario, which predicted shoreline tsunami water level at Fish Harbor ranges from 3.9 to 5.2 feet above MSL. During the next 30 years, sea level rise is not expected to significantly impact the Port. Further, measures to minimize impacts from seiches or tsunamis, such as the breakwater and constructing facilities at adequate elevation, are currently in place throughout the Port, which would also serve to limit the effects of sea level rise. It is assumed that elevations at the new site would be similar to elevations that of other areas within the Port, and as a result, this alternative would be less than significant.

6.3.4.2.7 Alternative 6 – No Project

Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no development would occur, including the required improvements, the existing lease would be revoked, forcing ALBS to cease operation on the site. Under this scenario, ALBS would be required to clear the site and return it to its original condition. This alternative would have fewer impacts related to geologic resources than the proposed Project, including impacts from seismically induced events.

The No Project Alternative would expose fewer people and structures to potential fault rupture, seismic ground shaking, liquefaction, other seismically-induced ground failure within the Project area, and tsunami and sea level rise, as the site would be completely cleared of all operations and employees.

Impacts from seismically induced events would be completely eliminated when compared to the proposed Project because the site would be completely cleared of structures and employees. As a result, this alternative would be less than significant.

6.3.4.2.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the Project site because only the landside construction would occur under this alternative. No maintenance dredging, CDF construction or construction of the concrete piers for the proposed 600- and 100-ton boat hoists would occur under this alternative. Improvements would be made that would bring the operation into compliance with the NPDES stormwater requirements. As a result, ALBS would be able to enter into a new 30-year lease. In addition, the landside aging infrastructure would be improved, including the replacement of paving, lighting, and utilities. The potentially historic structures would also be removed under this alternative.

Because the Project components would be implemented, and an additional 30 employees would be added to the facility, this increased exposure of people to seismic hazards cannot be precluded. When compared to the proposed Project, and incorporation of modern construction engineering and safety standards and compliance with current building regulations, impacts due to seismically induced ground failure would be less than significant. In addition, exposures of people or property to tsunami risks are minimal due to the remote nature of the tsunamis in the Project area and the relative low water levels associated with the worst-case faulting scenario, which predicted shoreline tsunami water level at Fish Harbor ranges from 3.9 to 5.2 feet above MSL. The Project site ranges in elevation from 10.1 feet above MSL (7.3 feet MLLW) along the timber wharf to approximately 14.8 feet MSL (12 feet above MLLW) in the upland areas. During the next 30 years, sea level rise at the Project site is predicted to rise by 1.5 feet (17 inches) or less. This is not significant; therefore, as with the proposed Project, the site is not expected to be significantly impacted by sea level rise. Further, measures to minimize impacts from seiches or tsunamis, such as the breakwater and constructing facilities at adequate elevation, are currently in place throughout the Port, which would also serve to limit the effects of sea level rise. As a result, this alternative would be less than significant.

6.3.4.3 Groundwater and Soils

6.3.4.3.1 Proposed Project

The proposed Project site is located within the West Coast Basin of the Los Angeles Coastal Groundwater Basin. There are no designated groundwater recharge areas at the proposed Project site or in the vicinity, and only saline or otherwise non-potable groundwater underlies the coastal areas of the Los Angeles Basin.

Soil and/or groundwater contamination has been identified during previous investigations that were conducted at the Project site, as discussed in Section 3.6.2.3. Those results indicated that there are two issue areas within the Project site, including: 1) the northern-most portion of the site, which is contaminated with TPH and PCBs; and, 2) the marine railways, which is contaminated primarily as a result of spend sandblast grit. The construction and operation of the proposed Project would expose on-site personnel to soil contamination; however, the proposed Project would handle, transport, remediate, and/or dispose all contaminated soil in accordance with all applicable federal, state, and local laws and regulations and in accordance with the LAHD's Site Remediation and Contamination Contingency Plan Lease Requirements which would result in a less than significant Project-level impact.

6.3.4.3.2 Alternative 1 – Reduced Project: Water Quality Improvements

This alternative would significantly decrease the amount of redevelopment on the Project site by eliminating all of the proposed improvements with the exception of those that would ensure compliance with the WDR and NPDES requirements to remain in operation. Because the majority of the improvements would not occur under this alternative, the amount of construction, including activities such as grading, trenching, and dredging, would not occur, which would reduce the possibility of exposing people to contaminated materials during the construction process. In addition, the potential for contaminated soils to impact other areas and/or ground water would be reduced, as they would not be disturbed through the construction process. Although the cleanup of legacy soils would not occur under this alternative, the conditions would not worsen as a result of this alternative. As a result, this alternative would remain less than significant. However, the benefits associated with the cleanup of legacy contaminants would not occur.

Because of the fragmented and saline nature of the groundwater beneath the site, the groundwater is unusable for human purposes. Neither the proposed Project nor this alternative would significantly impact groundwater use, levels, or flows. Therefore, impacts under this alternative would be less than significant.

6.3.4.3.3 Alternative 2 – Reduced Project: Limited Demolition

The alternative would be similar to the proposed Project; however, unlike the proposed Project only some of the three potentially historic structures (Buildings C1, A2, or A3) would be demolished and no new building would be constructed. . Some of the legacy landside contamination and all the dredging of contaminated sediment and creation of CDFs associated the proposed would occur under this alternative. As a result, most of the proposed operational increases would occur, including the proposed increase in the number of ships serviced at the site and an increase in the number of employees at the site. Because impacts would be similar to the proposed Project, impacts would remain less than significant. However, the benefits associated with the cleanup of the landside legacy contaminants would be reduced.

Because of the fragmented and saline nature of the groundwater beneath the site, the groundwater is unusable for human purposes. Neither the proposed Project nor this alternative would significantly impact groundwater use, levels, or flows. Therefore, impacts under this alternative would be less than significant.

6.3.4.3.4 Alternative 3 – Retention of Historic Buildings

The alternative would decrease the amount of development on the site, as all the potentially historic buildings would be retained and the new building would not be needed. Landside legacy contaminants would not be remediated under this alternative, but the dredging of legacy contaminated sediments would be placed in the two CDF's. Construction activities would be similar, with a decrease in the demolition activities because the potentially historic structures would not be demolished. Since none of the potentially historic structures would be demolished, the proposed operational increases would be limited, particularly related to the safety and efficient operation of one or both of the new boat hoists (assuming either would be deemed economical under the restrictive site lay out under this alternative). Because impacts would be similar or less than the proposed Project, impacts would be less than significant. However, the benefits associated with the cleanup of the landside legacy contaminants would be reduced.

Because of the fragmented and saline nature of the groundwater beneath the site, the groundwater is unusable for human purposes. Neither the proposed Project nor this alternative would significantly impact groundwater use, levels, or flows. Therefore, impacts under this alternative would be less than significant.

6.3.4.3.5 Alternative 4 –Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, LAHD would relocate three of the potentially historic buildings slated for demolition 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. All of the components of the proposed Project would be constructed under this alternative, including the cleanup of legacy contaminants in soils and sediment, as all the buildings proposed for removal would be eliminated from the site.

Under this alternative, all of the proposed operational increases would occur, including the proposed increase in the number of ships serviced at the site and an increase in the number of employees at the site. Construction activities on the site would be similar to the proposed Project, except that the potentially historic structures would be relocated instead of demolished. As a result, impacts would be less than significant.

Because of the fragmented and saline nature of the groundwater beneath the site, the groundwater is unusable for human purposes. Neither the proposed Project nor this alternative would significantly impact groundwater use, levels, or flows. Therefore, impacts under this alternative would be less than significant.

Because the buildings would potentially be relocated elsewhere within the Port, the potential impact area would expand beyond the existing Project site. However, measures would be taken at either of the redevelopment sites through their respective entitlement processes to reduce construction impacts to groundwater and soils. As a result, relocation of the historic structures would remain less than significant.

6.3.4.3.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites.

All four sites are developed to varying degrees and three of the four sites currently contain historic resources that would have to be demolished to make room for ALBS operations. Three of the alternate sites are located within the immediate vicinity of the existing Project site, and likely have similar contamination issues. As a result, both construction and operation impacts would likely be similar to the proposed Project. Similar to the proposed Project, the soils on an alternate site would be cleaned during the construction process, resulting in a beneficial impact on soils. Measures would be required by the LAHD through lease conditions to reduce impacts to groundwater and soils at all of the alternate sites, similar those required at the proposed Project site. Additionally, cleanup of soil and sediment contamination at the existing site would be occur; however, no CDFs would be created and instead the contaminated dredge material would be hauled off-site. Because impacts under this alternative would similar to the proposed Project, this alternative would remain less than significant.

Because of the fragmented and saline nature of the groundwater beneath Port Complex, the groundwater is unusable for human purposes. Neither the proposed Project nor this alternative would significantly impact groundwater use, levels, or flows. Therefore, impacts under this alternative would be less than significant.

6.3.4.3.7 Alternative 6 – No Project

Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. They would be required to cease operation on the site, and then clear the site of all operations. Under this alternative, impacts to groundwater and soils would be eliminated and ALBS would be required to return the site to its original conditions, including cleanup of legacy contamination in the soils and sediment. No CDFs would be created and instead the contaminated dredge material would be hauled off-site. As a result, this alternative would be less than significant.

Because of the fragmented and saline nature of the groundwater beneath the site, the groundwater is unusable for human purposes. Neither the proposed Project nor this alternative would significantly impact groundwater use, levels, or flows. Therefore, impacts under this alternative would be less than significant.

6.3.4.3.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the site because only the landside construction would occur, allowing ALBS to remain in operation. There would be no maintenance dredging, no CDF construction, and no construction of the concrete piers for the new 600- and 100-ton boat hoists. Landside legacy contamination would be removed under this alternative similar to the proposed Project.

Because the majority of the improvements would not occur under this alternative (all the improvements within or over the water), the amount of construction, including activities such as grading, trenching, and dredging, would be greatly reduced, which would reduce the possibility of exposing people to contaminated materials during the construction process. As a result, overall this alternative would be less than the proposed Project and less than significant.

Because of the fragmented and saline nature of the groundwater beneath the site, the groundwater is unusable for human purposes. Neither the proposed Project nor this alternative would significantly impact groundwater use, levels, or flows. Therefore, impacts under this alternative would be less than significant.

6.3.4.4 Hazards and Hazardous Materials

6.3.4.4.1 Proposed Project

The primary features of the proposed Project that could contribute to increased risks include activities associated with the demolition of the existing buildings, timber wharf, finger piers, and other ancillary structures, excavation and grading (including removal of contaminated soils), dredging, and creation of the two CDFs.

The proposed Project site contains known and potentially unknown contamination related to past uses on the site and other uses in the Project vicinity; however, these areas are not expected to pose an exposure risk to the public or to the environment under the proposed Project. Construction and operation of the proposed Project would not involve the handling of significant amounts of hazardous materials beyond those needed for construction equipment and activities, and normal boat building/maintenance operations. Furthermore, with the implementation of BMPs and compliance with the state and federal requirements for the transport, handling, and storage of any hazardous materials would minimize the potential for an accidental release of hazardous materials and/or explosion during construction and operation of the proposed Project

The proposed Project would be subject to applicable federal, state, and local laws and regulations governing the spill prevention, storage, use, and transport of hazardous materials, as well as emergency response to hazardous material spills, thus minimizing the potential for adverse health and safety impacts. Compliance with all applicable hazardous waste laws and regulations would help ensure the safe development and operation of the expanded ALBS; therefore, impacts would be less than significant.

In addition, the contractor would coordinate with the agencies responsible for the emergency response and evacuation planning: the LAPD, LAFD, Port Police, and USCG. Construction and demolition activities would be subject to emergency response and evacuation systems implemented by LAFD.

6.3.4.4.2 Alternative 1 – Reduced Project: Water Quality Improvements

Alternative 1 would substantially reduce the amount of development on the site in comparison to the proposed Project, as this alternative would not implement any of the proposed improvements on the site with the exception of implementation of measures to comply with Los Angeles RWQCB requirements. Improvements associated with Los Angeles RWQCB requirements include either placing dikes around the existing buildings and/or changing the slope of the site to drain away from Fish Harbor.

Under this alternative, very few changes to the site would occur. No demolition of existing structures would occur, the new building would not be added to the site, the new boat hoists would not be installed, and no dredging or creation of CDF's would occur.

As a result, existing legacy contaminated soils and sediments would not be disturbed and operations would not increase so the amount of hazardous materials used on the site would also not increase, as compared to the proposed Project. As a result, impacts under this alternative would be less than the proposed Project and, therefore, less than significant.

6.3.4.4.3 Alternative 2 – Reduced Project: Limited Demolition

Alternative 2 would be similar to the proposed Project; however, unlike the proposed Project only some of the three potentially historic structures (Buildings C1, A2, or A3) would be demolished. In addition, the new building would not be constructed under this alternative. All of the other Project components would be the same as the proposed Project.

Under this alternative, the amount of demolition and construction would be reduced, and the proposed Project site would not operate at its maximum potential as compared to the proposed Project. As a result, impacts under this alternative would be less than the proposed Project and, therefore, less than significant. As with the proposed Project, this alternative would be subject to applicable federal, state, and local laws and regulations governing the spill prevention, storage, use, and transport of hazardous materials, as well as emergency response to hazardous material spills, thus minimizing the potential for adverse health and safety impacts. Compliance with all applicable hazardous waste laws and regulations would help ensure the safe development and operation of the expanded ALBS; therefore, impacts would be less than significant.

In addition, the contractor would coordinate with the agencies responsible for the emergency response and evacuation planning: the LAPD, LAFD, Port Police, and USCG. Construction and demolition activities would be subject to emergency response and evacuation systems implemented by LAFD.

6.3.4.4.4 Alternative 3 - Retention of Historic Buildings

This alternative would reduce the overall amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, the three potentially historic structures (Buildings C1, A2, or A3) would not be demolished and no new building would be constructed. All of the other Project components would be the same as the proposed Project. However, because the existing historic buildings would not be demolished or relocated, implementation of this alternative would neither result in the complete modernization of the existing boat yard facilities nor provide for the same level of operational efficiency that would occur under the proposed Project.

Under this alternative, the amount of demolition and construction would be reduced, and the proposed Project site would not operate at its maximum potential as compared to the proposed Project. As a result, impacts under this alternative would be less than the proposed Project and, therefore, less than significant. As with the proposed Project, this alternative would be subject to applicable federal, state, and local laws and regulations governing the spill prevention, storage, use, and transport of hazardous materials, as well as emergency response to hazardous material spills, thus minimizing the potential for adverse health and safety impacts. Compliance with all applicable hazardous waste laws and regulations would help ensure the safe development and operation of the expanded ALBS; therefore, impacts would be less than significant.

In addition, the contractor would coordinate with the agencies responsible for the emergency response and evacuation planning: the LAPD, LAFD, Port Police, and USCG.

Construction and demolition activities would be subject to emergency response and evacuation systems implemented by LAFD.

6.3.4.4.5 Alternative 4 – Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, LAHD would relocate all of the potentially historic buildings slated for demolition 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. Should one of the two buildings not be relocated, it would be demolished. All of the components of the proposed Project would be constructed under this alternative, as both buildings would be removed from the site. Under this alternative, impacts would occur beyond the boundaries of the existing ALBS site.

Because all of the Project components would be constructed under this alternative, impacts would be the same as the proposed Project. The proposed Project would result in similar impacts; as a result, this alternative would be less than significant. As with the proposed Project, this alternative would be subject to applicable federal, state, and local laws and regulations governing the spill prevention, storage, use, and transport of hazardous materials, as well as emergency response to hazardous material spills, thus minimizing the potential for adverse health and safety impacts. Compliance with all applicable hazardous waste laws and regulations would help ensure the safe development and operation of the expanded ALBS; therefore, impacts would be less than significant.

In addition, the contractor would coordinate with the agencies responsible for the emergency response and evacuation planning: the LAPD, LAFD, Port Police, and USCG. Construction and demolition activities would be subject to emergency response and evacuation systems implemented by LAFD.

6.3.4.4.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites.

Under this alternative, the amount of demolition would increase, as the entire existing site would be cleared, which would increase the potential exposure of workers to asbestos-containing materials (ACM), lead-containing paint (LCP), and/or other hazardous materials (e.g., mercury-containing switches, equipment containing PCBs), which could involve potential health hazards. Removal of buildings at the alternate site could also potentially expose workers to ACM, LCP, and/or other hazardous materials, as well as potential exposure to soil contamination should it be present at the alternative site. Known or suspected contaminated substances in structures and soil would be removed in accordance with federal, state, and local regulations prior to demolition, thereby minimizing the exposure of construction workers to contaminants, and minimizing the potential for releases of such substances to the environment.

The clearing of the site would allow for the landside legacy containments to be cleared across the entire site as opposed to the proposed Project where legacy contaminants below the remaining buildings would not be removed, and legacy contaminants in fish harbor would be dredged. The contaminated soils and dredge material would be hauled to an appropriate landfill for disposal.

Similar to the proposed Project, use of an alternate site within the Port Complex would result in a similar exposure of people during both operations and construction to hazards and hazardous materials because the Project would operate as close to peak conditions as possible at the alternate site. As with the proposed Project, this alternative would be subject to applicable federal, state, and local laws and regulations governing the spill prevention, storage, use, and transport of hazardous materials, as well as emergency response to hazardous material spills, thus minimizing the potential for adverse health and safety impacts. In addition, the contractor would coordinate with the agencies responsible for the emergency response and evacuation planning: the LAPD, LAFD, Port Police, and USCG. Construction and demolition activities would be subject to emergency response and evacuation systems implemented by LAFD.

Given that workers would have a increased potential for exposure to hazardous materials during construction activities due the greater amount of demolition that would occur under Alternative 6, the impact would be slightly greater as compared to the proposed Project. However, compliance with all applicable hazardous waste laws and regulations would help ensure the safe development and operation of the expanded ALBS; therefore, impacts would be less than significant.

6.3.4.4.7 Alternative 6 – No Project

Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no development would occur, including the required improvements, the existing lease would be revoked, forcing ALBS to cease operation on the site. Under this scenario, ALBS would be required to clear the site and return it to its original condition.

Under this alternative, the amount of demolition would increase, as the entire site would be cleared, which would increase the potential exposure of workers to ACM, LCP, and/or other hazardous materials (e.g., mercury-containing switches, equipment containing PCBs), which could involve potential health hazards. Removal of buildings at the alternate site could also potentially expose workers to ACM, LCP, and/or other hazardous materials, as well as potential exposure to soil contamination should it be present at the alternative site. Known or suspected contaminated substances in structures and soil would be removed in accordance with federal, state, and local regulations prior to demolition, thereby minimizing the exposure of construction workers to contaminants, and minimizing the potential for releases of such substances to the environment.

The clearing of the site would allow for the landside legacy containments to be cleared across the entire site as opposed to the proposed Project where legacy contaminants below the remaining buildings would not be removed, and legacy contaminants in fish harbor would be dredged. The contaminated soils and dredge material would be hauled to an appropriate landfill for disposal.

No construction would occur under Alternative 6 and the proposed Project site would completely cease operations. The No Project Alternative would expose fewer people to

hazards and hazardous materials as compared to the proposed Project as operations would cease. As a result, impacts under this alternative would be less than significant.

6.3.4.4.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the Project site because only the landside construction would occur under this alternative. No dredging, CDF construction or construction of the concrete piers for the proposed 600- and 100-ton boat hoists would occur under this alternative.

Improvements would be made that would bring the operation into compliance with the NPDES stormwater requirements. As a result, ALBS would be able to enter into a new 30-year lease.

Under this alternative, the amount of water side demolition and construction would be eliminated, and the boat shop would not operate at its maximum potential as compared to the proposed Project. As with the proposed Project, this alternative would be subject to applicable federal, state, and local laws and regulations governing the spill prevention, storage, use, and transport of hazardous materials, as well as emergency response to hazardous material spills, thus minimizing the potential for adverse health and safety impacts. Compliance with all applicable hazardous waste laws and regulations would help ensure the safe development and operation of the expanded ALBS; therefore, impacts would be less than significant.

In addition, the contractor would coordinate with the agencies responsible for the emergency response and evacuation planning: the LAPD, LAFD, Port Police, and USCG. Construction and demolition activities would be subject to emergency response and evacuation systems implemented by LAFD.

6.3.4.5 Land Use

6.3.4.5.1 Proposed Project

The proposed Project site would remain in use as a boat shop and all existing uses and activities occurring on the site would continue. No changes to the existing zoning would occur, and no additional uses would be added to the site that conflict with the existing zoning. The Project would be consistent with the adopted zoning for the site.

The Project is consistent with applicable objectives, policies, and programs contained in the Port of Los Angeles Plan, Los Angeles Plan Element of the City's General Plan, State Tidelands Trust, and the San Pedro Community Plan. The proposed Project would be consistent with all applicable SCAG policies, such as the Regional Comprehensive Plan and Guide developed by SCAG and with the Regional Housing Needs Assessment. The proposed Project would also be consistent with the industrial short- and long-range preferred uses identified in the PMP for Area 8, Fish Harbor, which encompasses the Project site.

Implementation of the proposed Project would not conflict with any surrounding land uses during either the construction or operation phase; therefore, a less than significant impact would occur.

6.3.4.5.2 Alternative 1 – Reduced Project: Water Quality Improvements

Alternative 1 would substantially reduce the amount of development on the site in comparison to the proposed Project, as this alternative would not implement any of the proposed improvements on the site with the exception of implementation of measures to

comply with Los Angeles RWQCB requirements. Improvements associated with Los Angeles RWQCB requirements include either placing dikes around the existing buildings and/or changing the slope of the site to drain away from Fish Harbor. This alternative would occur entirely within the existing Project site.

Under this alternative, very few changes to the site would occur. No demolition of existing structures would occur, no new buildings would be added to the site, and the new boat hoists would not be installed. The intensity of land uses on the site would be less than the proposed Project. No significant changes to the land use or zoning would occur that would make the site or the site uses incompatible with surrounding uses. This alternative would be less than significant.

6.3.4.5.3 Alternative 2 – Reduced Project: Limited Demolition

Alternative 2 would reduce the total amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, unlike the proposed Project only some of the three potentially historic structures (Buildings C1, A2, or A3) would be demolished. In addition, the new building would not be constructed under this alternative. All of the other Project components would be the same as the proposed Project. This alternative would occur entirely within the existing Project site.

Under this alternative, there would be slightly less demolition and the new structure would not be constructed. The intensity of land uses on the site would be slightly less than the proposed Project. No changes to the land use or zoning of the site would occur that would make the site or the site uses incompatible with surrounding uses. However, as with the proposed Project, an amendment to the PMP would be required to establish a zoning designation for the new land created by the CDF. This alternative would be less than significant.

6.3.4.5.4 Alternative 3 - Retention of Historic Buildings

This alternative would reduce the overall amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, the potentially historic buildings (Buildings C1, A2, or A3) would not be demolished and the new building would not be constructed. All of the other Project components would be the same as the proposed Project. However, because the existing historic buildings would not be demolished or relocated, implementation of this alternative would neither result in the complete modernization of the existing boat yard facilities nor provide for the same level of operational efficiency that would occur under the proposed Project. This alternative would occur entirely within the existing Project site.

Under this alternative, there would be slightly less demolition, as all of the historic structures would be retained, and the new structure would not be constructed. As a result, the land use intensity on the site would be slightly less than the proposed Project. No changes to the existing land use or zoning would occur that would conflict with existing regulations would occur and the site would not be incompatible with surrounding uses. However, as with the proposed Project, an amendment to the PMP would be required to establish a zoning designation for the new land created by the CDF. This alternative would be less than significant.

6.3.4.5.5 Alternative 4 – Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, LAHD would relocate all of the potentially historic buildings slated for demolition 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. Should one of the two buildings not be relocated, it would be demolished. All of the components of the proposed Project would be constructed under this alternative, as both buildings would be removed from the site. Under this alternative, impacts would occur beyond the boundaries of the existing ALBS site.

Under this alternative, all of the components of the proposed Project would be constructed on the site. As a result, the land use impacts would be identical to the proposed Project. Land use impacts under the proposed Project are less than significant and, as a result, would remain less than significant under this alternative.

However, under this alternative, the historic structures would be relocated to one of two redevelopment project sites within the Port. The structures would be located amongst other structures within one of the redevelopment areas and would not significantly change land use intensity on that site, require rezoning, and would not be incompatible with surrounding uses. However, as with the proposed Project, an amendment to the PMP would be required to establish a zoning designation for the new land created by the CDF. This alternative would not result in a significant land use impact.

6.3.4.5.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites.

Under this alternative, all facilities within the existing ALBS site would be removed and relocated to one of four alternate sites. As a result, land use impacts on the existing Project site would be completely eliminated and impacts to the existing site would be, therefore, less than significant.

Relocation of the ALBS facilities to one of four alternative sites would result in land use impacts at the site where the facilities are ultimately located. All four sites are located within the Port and all of the sites are zoned for industrial use. The ALBS use would not conflict with the zoning or land use at any of the sites and it would not be incompatible with surrounding uses, which would all be industrial in nature. No CDFs would be installed at the alternate sites to create new land and thus, no amendment to the PMP would likely be required. As a result, this alternative would be less than significant.

6.3.4.5.7 Alternative 6 – No Project

Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no development would occur, including the required improvements, the existing lease would be revoked, forcing ALBS to cease operation on the site. Under this scenario, ALBS would be required to clear the site and return it to its original condition. Because all of the existing infrastructure and structures on the site would be removed, no new land use impacts would occur and this alternative would remain less than significant.

6.3.4.5.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the Project site because only the landside construction would occur under this alternative. No maintenance dredging, CDF construction or construction of the concrete piers for the proposed 600- and 100-ton boat hoists would occur under this alternative.

Improvements would be made that would bring the operation into compliance with the NPDES stormwater requirements. As a result, ALBS would be able to enter into a new 30-year lease.

In addition, the landside aging infrastructure would be improved, including the replacement of paving, lighting, and utilities. The potentially historic structures would also be removed under this alternative.

Under this alternative, there would be slightly less demolition, as all of the historic structures would be retained, and the new structure would not be constructed. As a result, there would be fewer land use changes to the Project site. No changes to the existing land use or zoning would occur that would conflict with existing regulations would occur and the site would not be incompatible with surrounding uses. This alternative would be less than significant.

6.3.4.6 Population and Housing

6.3.4.6.1 Proposed Project

The geographic region of analysis for impacts on Population and Housing related to the proposed Project includes the Port of Los Angeles and the communities of San Pedro and Wilmington. The proposed Project would not directly or indirectly induce substantial population growth. It would not provide any new housing, nor would it directly induce development of new housing in the region by providing new infrastructure. Similarly, the amount of additional employment opportunities created by the proposed Project would be small when compared to the existing size of the regional economy, and therefore would not indirectly induce population growth through labor migration. The proposed Project would result in a less than significant impact.

6.3.4.6.2 Alternative 1 – Reduced Project: Water Quality Improvements

Alternative 1 would substantially reduce the amount of development on the site in comparison to the proposed Project, as this alternative would not implement any of the proposed improvements on the site with the exception of implementation of measures to comply with Los Angeles RWQCB requirements. Improvements associated with Los Angeles RWQCB requirements include either placing dikes around the existing buildings and/or changing the slope of the site to drain away from Fish Harbor.

Under this alternative, very few changes to the site would occur. No demolition of existing structures would occur, no new buildings would be added to the site, and the new boat hoists would not be installed. As a result, no operational increases would occur, and no new employees would be added to the site, and the number of short-term construction jobs generated would be less than the proposed Project. The potential for growth in population would be less than the proposed Project and less of an overall impact in regards to population and housing would occur. This alternative would result in a less than significant impact on population and housing.

6.3.4.6.3 Alternative 2 – Reduced Project: Limited Demolition

Alternative 2 would reduce the total amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, unlike the proposed Project only some of the three potentially historic structures (Buildings C1, A2, or A3) would be demolished. In addition, the new building would not be constructed under this alternative. All of the other Project components would be the same as the proposed Project.

Under this alternative, there would be slightly less demolition and the new structure would not be constructed. Operational capacity would not be fully achieved in comparison the proposed Project because one or more of the potentially historic structures would remain on the site. As a result, fewer employees would be added to the site and less of an overall impact in regards to population and housing would occur. This alternative would result in a less than significant impact on population and housing.

6.3.4.6.4 Alternative 3 - Retention of Historic Buildings

This alternative would reduce the overall amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, the potentially historic buildings (Buildings C1, A2, or A3) would not be demolished. In addition, the new building would not be constructed on the site. All of the other Project components would be the same as the proposed Project. However, because the existing historic buildings would not be demolished or relocated, implementation of this alternative would neither result in the complete modernization of the existing boat yard facilities nor provide for the same level of operational efficiency that would occur under the proposed Project.

Under this alternative, there would be slightly less demolition and the new structure would not be constructed, which could result in slightly fewer construction jobs. Operational capacity would not be fully achieved in comparison the proposed Project because the potentially historic structures would remain on the site. As a result, fewer employees would be added to the site and less of an overall impact in regards to population and housing would occur. This alternative would result in a less than significant impact on population and housing.

6.3.4.6.5 Alternative 4 – Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, LAHD would relocate all of the potentially historic buildings slated for demolition 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. Should one of the two buildings not be relocated, it would be demolished. All of the components of the proposed Project would be constructed under this alternative, as both buildings would be removed from the site.

The number of short-term construction jobs associated with this alternative would be similar or greater than the proposed Project. Under this alternative, all operational increases would occur because all of the Project components would be constructed and implemented, including the increased number of vessels serviced and the increased number of employees at the site. Because impacts on population would be less than significant under the proposed Project, they would remain less than significant under this alternative as well.

6.3.4.6.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites.

The number of short-term construction jobs associated with this alternative would be similar or greater than the proposed Project. Operational increases would be the same under this alternative as under the proposed Project, as all Project components would be constructed and/or implemented. As a result, this alternative is less than significant.

6.3.4.6.7 Alternative 6 – No Project

Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no development would occur, including the required improvements, the existing lease would be revoked, forcing ALBS to cease operation on the site. Under this scenario, ALBS would be required to clear the site and return it to its original condition.

Under this alternative, demolition of the existing buildings/structures and dredging and removal of contaminated sediments would result in short-term construction jobs similar to that of the proposed Project. However, operations on the site would cease, resulting in a decrease in employees on the site as compared to the proposed Project and existing conditions. While this loss of approximately 70 to 100 jobs would have localized affects, it would not significantly affect employment levels or population distribution in the local area and region as a whole. As a result, this alternative would be less than significant.

6.3.4.6.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the Project site because only the landside construction would occur under this alternative. No maintenance dredging, CDF construction or construction of the concrete piers for the proposed 600- and 100-ton boat hoists would occur under this alternative.

Improvements would be made that would bring the operation into compliance with the NPDES stormwater requirements. As a result, ALBS would be able to enter into a new 30-year lease.

In addition, the landside aging infrastructure would be improved, including the replacement of paving, lighting, and utilities. The potentially historic structures would also be removed under this alternative.

Under this alternative, the overall amount of development on the site would be reduced as compared to the proposed Project. Operational capacity would not be fully achieved in comparison the proposed Project because only a portion of the improvements would occur. As a result, fewer employees would be added to the site and less of an overall impact in regards to population and housing would occur. This alternative would result in a less than significant impact on population and housing.

6.3.4.7 Public Services and Utilities

6.3.4.7.1 Proposed Project

Public Services

The proposed Project construction or operations would not affect emergency response times for police services, fire services, or the Coast Guard because the site would have the same land use and similar layout and same distances to emergency facilities as the existing boat shop. The operational capacity of the facility would not increase enough to create a significant increase in demand for public services. The proposed Project would not increase the demand for additional law enforcement officers and/or facilities such that the U.S. Coast Guard (USCG), Los Angeles Police Department (LAPD), or the Los Angeles Harbor Department Police (Port Police) would not be able to maintain an adequate level of service without additional facilities. Impacts to public services would be less than significant.

Public Utilities

Construction of additional land area (i.e., CDF) would require additional infrastructure such as lighting and utility facilities/infrastructure to ensure optimum cargo movement. New onsite utility lines (water, wastewater, storm drains, electricity, and gas) would be constructed to serve increasing boat shop operations; the relocation and/or extension of some existing utility lines would also occur. This new infrastructure would tie into the existing utility lines that currently serve the Project site. Provisions for water and wastewater service to the proposed Project site could require some minor offsite construction to connect new onsite utilities with existing infrastructure. All infrastructure improvements and connections that occur within City streets would comply with the LAMC, and would be performed under permit by the City Bureau of Engineering and/or LADWP.

Although construction and/or expansion of on-site water or wastewater lines would be required to support new boat shop development, the increases in water demand and wastewater generation would be minimal and there is sufficient capacity.

The existing boat shop operations generate solid waste consisting of nonhazardous materials, such as food and beverage containers, paper products, and other miscellaneous personal trash disposed of by on-site staff. Solid waste generated by boat shop operations complies with federal, state, and local regulations and codes pertaining to solid waste disposal, as would solid wastes generated from subsequent boat shop operations. Impacts to utilities are less than significant.

6.3.4.7.2 Alternative 1 – Reduced Project: Water Quality Improvements

This alternative would significantly decrease the amount of development on the site by eliminating all of the proposed improvements with the exception of those that would ensure compliance with the Los Angeles RWQCB requirements to remain in operation. Under this alternative, no increase in vessels would occur at the site over baseline conditions and no additional employees would be added to the existing operation. As a result, no additional demand on public services or utilities would occur. As compared to the proposed Project, impacts would be slightly reduced. Impacts under this alternative would be less than significant.

6.3.4.7.3 Alternative 2 – Reduced Project: Limited Demolition

Alternative 2 would be similar to the proposed Project; however, unlike the proposed Project only some of the three potentially historic structures (Buildings C1, A2, or A3) would be demolished and the new building would not be constructed. Most of the proposed operational increases would occur, including the likely increase in the number of ships serviced at the site and the proposed increase in employees, although not to the extent of the proposed Project.

Under this alternative, only some of the two potentially historic structures on the site would be demolished. As a result, the amount of solid waste produced as a result of construction activities would be less than the proposed Project. Impacts on all other public services and utilities would be the similar to the proposed Project, because all of the other construction and operational components would be the similar; however it is more than likely they would be less as the site would not operate under optimal conditions. Impacts under this alternative would be less than significant and both construction and operational impacts on public services and utilities would be slightly less than the proposed Project under this alternative.

6.3.4.7.4 Alternative 3 – Retention of Historic Buildings

This alternative would slightly decrease the amount of development on the site, as all of the potentially historic buildings (Buildings C1, A2, or A3) would remain on the site and the new building would not be constructed. As a result, all of the proposed operational increases would occur, including the proposed increase in the number of ships serviced at the site and the proposed increase in employees. However, the site would not provide for the same level of operational efficiency that would occur under the proposed Project and, thus, operational levels could be slightly impacted under this alternative.

Under this alternative, the potentially historic structures on the site would not be demolished and legacy soil contamination under the buildings would not be removed. As a result, the amount of solid waste produced as a result of construction activities would be less than the proposed Project. Impacts on all other public services and utilities would be similar, if not a slightly less due to a decrease in operational efficiency on the site, as the proposed Project, because all of the other construction and operational components would be similar to the proposed Project. Impacts under this alternative would be less than significant.

6.3.4.7.5 Alternative 4 – Relocation of Historic Buildings

This alternative would have operational impacts similar to the proposed Project, as all project components would be constructed on the site. As a result, operational impacts would be the same as the proposed Project.

Under this alternative, LAHD would relocate all of the potentially historic buildings slated for demolition 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. As a result, the amount of solid waste from demolition produced as a result of construction activities would be less than the proposed Project. Impacts on all other public services and utilities would be the same as the proposed Project, because all of the other construction and operational components would be the same. Impacts under this alternative would be less than significant.

6.3.4.7.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites.

All four sites are developed to varying degrees and three of the four sites currently contain historic resources that would have to be demolished to make room for ALBS operations. In addition, the remaining facilities on the ALBS site would have to be demolished to return the site to pre-lease conditions. Additionally, the contaminated dredge material would be disposed of at a land fill instead of being sequestered onsite in CDFs. As a result, solid waste from the construction and demolition process would be greater than the proposed Project. Because ALBS would not operate at a greater level than under the proposed Project, operational impacts on public services and utilities would be approximately the same as the proposed Project. Although slightly greater than the proposed Project for construction, the impacts under this alternative are still anticipated to be less than significant.

6.3.4.7.7 Alternative 6 – No Project

Under this alternative, the proposed Project would not be constructed. ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no development would occur, including the required improvements, the existing lease would be revoked, forcing ALBS to cease operation on the site. Under this scenario, ALBS would be required to clear the site and return it to its original condition.

The No Project Alternative would not implement any of the proposed Project components, and all operation on the site would cease. As a result, there would be no increase in demand for public services and utilities the site. In this regard, impacts on public services and utilities would be less than the proposed Project.

However, the generation of solid waste would be greater than the proposed Project, because the Project site would be cleared of all facilities, there would be a greater amount of contaminated soil disposed of at a landfill than would occur under the proposed Project and, the contaminated dredge material would be disposed of at a land fill instead of being sequestered on-site in CDFs. As a result, this alternative would have a greater impact than the proposed Project for construction and a reduced impact compared to the

proposed Project for operations. Overall, impacts under this alternative would be less than significant.

6.3.4.7.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the site because only the landside construction would occur. There would be no dredging, no CDF construction, and no construction of the concrete piers for the new 600- and 100-ton boat hoists. Because the boat hoists would not be installed, the number of vessels serviced on the site would not increase and the number of employees would not increase. As a result, no operational increases on public services or utilities would occur.

Under this alternative, the potentially historic buildings slated for removal would still be demolished and the new building would be constructed. However, the overall amount construction debris would be less than the proposed Project because the majority of the Project components would not be implemented.

6.3.4.8 Traffic and Transportation

6.3.4.8.1 Proposed Project

The transportation environmental setting for the transportation analysis includes those streets and intersections that would be used by both automobile and truck traffic to gain access to and from the Project site, as well as those streets that would be used by construction traffic (i.e., equipment and commuting workers). The transportation analysis includes freeway/roadway segments and intersections (7 intersections) that would be used by truck and automobile traffic to gain access to and from the proposed Project site. The segments and key intersections are presented in Section 3.12. These roadways and intersections would also be used by construction traffic.

The analysis of roadway impacts presented in Section 3.12 reflects both existing and future (2013) buildout conditions projected with the proposed Project in place including traffic from other regional development that is expected to occur whether the proposed Project is implemented or not.

There would be increased travel on the study area roadway system during construction of the proposed Project associated with construction worker's vehicles and trucks delivering equipment to and removing material from the site. As a standard practice, the Port requires contractors to prepare a detailed traffic management plan for Port projects.

The proposed Project would increase traffic volumes and reduce LOS at intersections within the proposed Project vicinity. There would be increased travel on the study area roadway system during operation of the proposed Project associated with workers vehicles to and from the site. As shown in Section 3.12, the anticipated intersection LOS during operation of the proposed Project with the peak number of additional workers on the roadway system would not be significant.

6.3.4.8.2 Alternative 1 – Reduced Project: Water Quality Improvements

Alternative 1 would substantially reduce the amount of development on the site in comparison to the proposed Project, as this alternative would not implement any of the proposed improvements on the site with the exception of implementation of measures to comply with Los Angeles RWQCB requirements. Improvements associated with Los Angeles RWQCB requirements include either placing dikes around the existing buildings and/or changing the slope of the site to drain away from Fish Harbor.

Under this alternative, very few changes to the site would occur. No demolition of existing structures would occur, no new buildings would be added to the site, and the new boat hoists would not be installed. As a result, no operational increases would occur, and no new employees would be added to the site. Impacts on both construction and operational traffic levels would be less than the proposed Project. Impacts under this alternative would be less than significant.

6.3.4.8.3 Alternative 2 – Reduced Project: Limited Demolition

Alternative 2 would reduce the total amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, unlike the proposed Project only some of the three potentially historic structures (Buildings C1, A2, or A3) would be demolished. In addition, the new building would not be constructed under this alternative. All of the other Project components would be the same as the proposed Project.

Under this alternative, there would be slightly less demolition and the new structure would not be constructed. Operational capacity would not be fully achieved in comparison the proposed Project because one or more of the historic structures would remain on the site. As a result, fewer employees would be added to the site and less of an overall impact in regards to both construction and operational traffic levels would occur. This alternative would result in a less than significant impact on traffic and transportation.

6.3.4.8.4 Alternative 3 - Retention of Historic Buildings

This alternative would reduce the overall amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, the historic (Buildings C1, A2, or A3) would not be demolished. In addition, the new building would not be constructed on the site. All of the other Project components would be the same as the proposed Project. However, because the existing historic buildings would not be demolished or relocated, implementation of this alternative would neither result in the complete modernization of the existing boat yard facilities nor provide for the same level of operational efficiency that would occur under the proposed Project.

Under this alternative, there would be slightly less demolition and the new structure would not be constructed. Operational capacity would not be fully achieved in comparison the proposed Project because the historic structures would remain on the site. As a result, fewer employees would be added to the site and less of an overall impact in regards to both construction and operational traffic levels would occur. This alternative would result in a less than significant impact on traffic and transportation.

6.3.4.8.5 Alternative 4 – Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, LAHD would relocate all of the potentially historic buildings slated for demolition 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. Should one of the two buildings not be relocated, it would be demolished. All of the components of the proposed Project would be constructed under this alternative, as both buildings would be removed from the site.

Under this alternative, all operational increases would occur because all of the Project components would be constructed and implemented, including the increased number of vessels serviced and the increased number of employees at the site. A small number of

additional truck trips could occur during the construction phase as a result of moving one or more of the historic structures. It is likely that this minimal number of truck trips would occur outside of the peak hours, thus not causing an additional impact due to construction traffic. Because impacts on traffic and transportation would be less than significant under the proposed Project, they would remain less than significant under this alternative as well.

6.3.4.8.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites as well as on the existing site. The dredged materials from the cleanup of legacy contaminants would be hauled off-site under Alternative 5. Given that demolition/construction would occur at two locations (existing site and alternate site) and a greater number of haul trucks would be needed to remove contaminated dredge materials and relocate the potentially historic buildings, the amount of construction traffic would be slightly greater than would occur under the proposed Project. However, it is anticipated that this temporary traffic increase would generally occur outside of peak hours and would result in less than significant impacts.

Operational increases would be the same under this alternative as under the proposed Project, as operations at an alternate site would be generate the same number of vehicle trips as the proposed Project, As a result, this alternative is less than significant.

6.3.4.8.7 Alternative 6 – No Project

Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no development would occur, including the required improvements, ALBS would cease operation on the site. Under this scenario, ALBS would be required to clear the site and return it to its original condition. While no new construction would occur, this alternative would generate a similar amount of construction traffic as it would involve a larger number of haul trucks because a more demolition would occur (i.e., all buildings/structures would be removed), a larger amount of landside soil would be removed, and dredge material would be hauled to an off-site landfill as opposed to sequestered in on-site CDFs.

Under this alternative, operations on the site would cease, resulting in a decrease in employees on the site as compared to the proposed Project. There would be some construction related traffic, as ALBS would be required to clear the site and haul sediments and dredge material for off-site disposal. However, the construction traffic would likely generate no more trips than the proposed Project. As a result, this alternative would be less than significant.

6.3.4.8.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the Project site because only the landside construction would occur under this alternative. No maintenance dredging, CDF construction or construction of the concrete piers for the proposed 600- and 100-ton boat hoists would occur under this alternative.

Improvements would be made that would bring the operation into compliance with the NPDES stormwater requirements. As a result, ALBS would be able to enter into a new 30-year lease.

In addition, the landside aging infrastructure would be improved, including the replacement of paving, lighting, and utilities. The potentially historic structures would also be removed under this alternative.

Under this alternative, the overall amount of development on the site would be reduced as compared to the proposed Project. Operational capacity would not be fully achieved in comparison the proposed Project because only a portion of the improvements would occur. As a result, fewer employees would be added to the site and less of an overall impact in regards to traffic and transportation would occur. This alternative would result in a less than significant impact on traffic and transportation.

6.3.4.9 Water Quality, Sediments, and Oceanography

6.3.4.9.1 Proposed Project

Wastewater discharges associated with Project operations and runoff from the proposed Project site would be regulated by NPDES or stormwater permits. The permits would specify constituent limits and/or mass emission rates that are intended to protect water quality and beneficial uses of receiving waters. In addition, the proposed Project would be operated in accordance with industrial SWPPPs that require monitoring and compliance with permit conditions. SUSMP requirements would also be implemented via the planning, design, and building permit processes. Therefore, impacts would be less than significant.

In-water construction of the proposed Project has the potential to result in spills directly to Harbor waters. These project-level spills during construction would be subject to regulations and plans (such as the site's Spill Prevention Plan) and spill responses by the dredging contractors (deploy floating booms to contain and absorb the spill and use pumps to assist the cleanup) that would prevent the accidental spill from causing a nuisance or from adversely affecting beneficial uses of the Harbor. Such accidental spills of petroleum hydrocarbons, hazardous materials, and other pollutants from proposed Project-related upland operations are expected to be limited to small volume releases because large quantities of those substances are unlikely to be used, transported, or stored on the site. Therefore, impacts would be less than significant

As discussed in Section 3.13.4.3, the proposed Project site is designated by FEMA as Flood Zone X. However, the proposed Project site is not in a 100-year flood zone and would not result in increased flooding. Implementation of the proposed Project (construction and operational activities) would not increase the potential for flooding on-site because on-site storm drains would be installed, BMPs would be employed to provide significant treatment of the pollutants prior to discharge, site elevations and the flat site topography would remain generally the same, and because the site is located adjacent to Harbor waters; therefore, impacts would be less than significant.

The baseline potential for erosion of soils in the proposed Project site is low due to the flat terrain, infrequent rainfall events, and moderate wind velocities. In addition, the proposed Project would operate on a slightly larger area than baseline conditions, the Project site would be completely paved, which would prevent erosion from occurring during shipyard operations. Construction and operation of the proposed Project would not accelerate natural processes of wind and water erosion because all applicable BMPs and other standard soil management procedures would be implemented to minimize erosion from the Project site; therefore, impacts would be less than significant.

6.3.4.9.2 Alternative 1 – Reduced Project: Water Quality Improvements

Alternative 1 would substantially reduce the amount of development on the site in comparison to the proposed Project, as this alternative would not implement any of the proposed improvements on the site with the exception of implementation of measures to comply with Los Angeles RWQCB requirements. Improvements associated with Los Angeles RWQCB requirements include either placing dikes around the existing buildings and/or changing the slope of the site to drain away from Fish Harbor. In addition, the proposed Project would be operated in accordance with industrial SWPPPs that require monitoring and compliance with permit conditions.

Under this alternative, very few changes to the site would occur. No demolition of existing structures would occur, no new buildings would be added to the site, the new boat hoists would not be installed, and no cleanup of the legacy contaminants would occur. As a result, no operational increases would occur, and no new employees would be added to the site. Impacts related to water quality, sediments, and oceanography would be reduced due to the reduction in project size under this alternative. Impacts under this alternative would be less than significant. However, the benefits to water quality that would occur by removing and sequestering legacy contaminants would not occur under Alternative 1.

6.3.4.9.3 Alternative 2 – Reduced Project: Limited Demolition

Alternative 2 would reduce the total amount of development on the site slightly in comparison to the proposed Project. This alternative would be similar to the proposed Project; however, unlike the proposed Project only some of the three potentially historic structures (Buildings C1, A2, or A3) would be demolished. In addition, the new building would not be constructed under this alternative. All of the other Project components would be the same as the proposed Project, including implementation of measures to comply with Los Angeles RWQCB requirements and operation of the site in accordance with the SWPPP.

Under this alternative, there would be slightly less demolition and the new structure would not be constructed. Operational capacity would not be fully achieved in comparison the proposed Project because one or more of the historic structures would remain on the site. Because the overall amount of construction would be less than the proposed Project, impacts on water quality, sediments and oceanography would likely be less than the proposed Project. This alternative would result in a less than significant impact on water quality, sediments, and oceanography.

6.3.4.9.4 Alternative 3 - Retention of Historic Buildings

This alternative would reduce the overall amount of development on the site slightly in comparison to the proposed Project. Under this alternative, none of the potentially historic buildings slated for removal would be demolished. In addition, the new building would not be constructed on the site. All of the other Project components would be the

same as the proposed Project including implementation of measures to comply with Los Angeles RWQCB requirements and operation of the site in accordance with the SWPPP. However, because the existing historic buildings would not be demolished or relocated, implementation of this alternative would neither result in the complete modernization of the existing boat yard facilities nor provide for the same level of operational efficiency that would occur under the proposed Project.

Under this alternative, there would be slightly less demolition and the new structure would not be constructed. Operational capacity would be greatly impaired in comparison the proposed Project because the historic structures would remain on the site. Because the overall amount of construction would be less than the proposed Project, impacts on water quality, sediments and oceanography would likely be less than the proposed Project. This alternative would result in a less than significant impact on water quality, sediments, and oceanography.

6.3.4.9.5 Alternative 4 – Relocation of Historic Buildings

This alternative would be the same as the proposed Project; however, LAHD would relocate all of the potentially historic buildings slated for demolition 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. All of the components of the proposed Project would be constructed under this alternative.

Because one or more of the buildings would potentially be relocated elsewhere within the Port, the potential impact area would expand beyond the existing Project site. However, measures have been taken at both of the redevelopment sites through their respective entitlement processes to reduce construction impacts (which could ultimately include relocation of the historic structures) to water quality, sediments, and oceanography. As a result, relocation of the potentially historic structures would remain less than significant.

6.3.4.9.6 Alternative 5 – Alternate Site

This alternative would construct and operate the ALBS at a different location elsewhere within the Port. LAHD has identified four possible alternate sites, which are shown on Figure 6-3. Each alternate site is the same size as the existing ALBS site. Two sites are located in Fish Harbor to the east of the Project site, one is to the west of Seaside Avenue with vessel access from the Main Channel, and the fourth site is on the mainland, off the East Basin. ALBS would attempt to operate on one of the alternate sites at the same level and capacity as the proposed Project. Each alternate site has varying levels of development and leaseholds within its boundaries, which could impact potential ALBS operations at each of the four potential sites. Demolition of existing buildings would be required at each of the alternate sites.

Measures would be required by the Port to reduce impacts to water quality, sediments, and oceanography at all of the alternate sites, similar those required at the proposed Project site. Because impacts under this alternative would be similar to the proposed Project, this alternative would remain less than significant.

6.3.4.9.7 Alternative 6 – No Project

Under this alternative, ALBS would not be in compliance with the current NPDES permit, which would require them to implement measures on the site to redirect stormwater away from Fish Harbor. Because no development would occur, including the required improvements, the existing lease would be revoked, forcing ALBS to cease operation on

the site. Under this scenario, ALBS would be required to clear the site and return it to its original condition. This alternative would have fewer construction-related impacts on geologic resources than the proposed Project, including impacts from seismically induced events.

Under this alternative, operations on the site would cease and the site would be returned to its original condition. Legacy contamination would be cleaned up under this alternative. Because the site would be cleared and operations would cease, impacts to water quality, sediments, and oceanography would be less than the proposed Project and, therefore, less than significant.

6.3.4.9.8 Alternative 7 – No Federal Action

This alternative would reduce the overall amount of development on the Project site because only the landside construction would occur under this alternative. No dredging, CDF construction or construction of the concrete piers for the proposed 600- and 100-ton boat hoists would occur under this alternative.

Improvements would be made that would bring the operation into compliance with the NPDES stormwater requirements. As a result, ALBS would be able to enter into a new 30-year lease.

In addition, the landside aging infrastructure would be improved, including the replacement of paving, lighting, and utilities. The potentially historic structures would also be removed under this alternative.

Under this alternative, the overall amount of development on the site would be reduced as compared to the proposed Project. Because the overall amount of construction would be significantly less than the proposed Project, impacts on water quality, sediments and oceanography would be less than the proposed Project. This alternative would result in a less than significant impact on water quality, sediments, and oceanography. However, the benefits to water quality that would occur by removing and sequestering legacy contaminants would not occur under Alternative 7.

6.4 Environmentally Superior Alternatives

CEQA requires identification of an environmentally superior alternative. The environmentally superior alternative was determined based on a ranking system that assigned numerical scores comparing the impacts under each resource area for each alternative with the baseline. The scoring system ranged from -2 if impacts are considered to be substantially reduced when compared to the baseline, to +1 if impact is considered to be somewhat greater when compared with the baseline. Table 6-4 presents the scoring system and rankings for each alternative.

Based on the above analysis, Alternative 1 – Reduced Project: Water Quality Improvements is the environmentally superior alternative because it would create fewer adverse impacts, including those which would be significant and unavoidable.

Under Alternative 1, Reduced Project, Water Quality Improvements, ALBS would not implement any of the proposed improvements on the site. However, in order to comply with the Los Angeles 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 and/or change the slope of the site so 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. Impacts on Air Quality, Meteorology, and Greenhouse Gases, Biological Resources, Cultural Resources, and Noise, would all be reduced. Impacts on Air Quality, Meteorology, and Greenhouse Gases would remain significant and unavoidable. The benefits to water quality that would occur by removing and sequestering legacy contaminants would not occur under Alternative 1.

As discussed above, this alternative would only meet one of the Project objectives. Under this alternative, ALBS would only be in compliance with its WDR and NPDES requirements by rerouting runoff away from Fish Harbor and into an oil/water separator. As a result, ALBS would be able to enter into a new 30-year lease.