

Appendix K.
Mitigation Monitoring Program

Resource	Description of Impact	Environmental Commitment/Mitigation	Start Date or Event	Responsible Party	Duration	Frequency	Level of Significance after Mitigation
Air Quality	AQ-2. Construction activities would produce emissions that would exceed SCAQMD daily NOx emission significance threshold.	<p>MM AQ-2-1 through MM AQ2-6, below, will be included in the Plan and Specification for the Construction Contract</p> <p>MM AQ-2.1: Construction Equipment Standards. Prior to and including December 31, 2011: All on-site mobile diesel-powered construction equipment greater than 50 Hp, except derrick barges and marine vessels shall meet the Tier 2 emission standards as defined in the USEPA Nonroad Diesel Engine Rule (USEPA 1998). In addition, all construction equipment greater than 50 Hp shall be retrofitted with a CARB-certified Level 3 diesel emissions control device.</p> <p>From January 1, 2012 through December 31, 2014: All off-road diesel-powered construction equipment greater than 50 Hp shall meet Tier-3 emission nonroad emission standards, at a minimum and shall be retrofitted with a CARB-certified Level 3 diesel emissions control device.</p> <p>From January 1, 2015 on: All off-road diesel-powered construction equipment greater than 50 Hp shall meet Tier 4 emission nonroad emission standards, at a minimum and shall be retrofitted with a CARB certified Level 3 diesel emissions control device.</p> <p>This mitigation measure shall be met, unless one of the following circumstances exists and the contractor is able to provide proof that any of these circumstances exists:</p> <ul style="list-style-type: none"> • A piece of specialized equipment is unavailable in a controlled form, or within the required Tier level, within the state of California, including through a leasing agreement. • A contractor has applied for necessary 	Onset of Construction	POLA/USACE	Duration of construction	Throughout construction as necessary.	NOx emissions would remain significant after mitigation

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		<p>incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available.</p> <ul style="list-style-type: none"> A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease. <p>MM AQ-2.2: Fleet Modernization for On-Road Trucks. Prior to and including December 31, 2011: All on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used on-site or to transport materials to and from the site shall comply with USEPA 2004 on road emission standards for PM10 and NOx (0.10 g/bhp-hr PM10 and 2.0 g/bhp-hr NOx).</p> <p>From January 1, 2012 on: All on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used at the Port of Los Angeles shall comply with EPA 2007 on-road emission standards for PM10 and NOx (0.01 g/bhp-hr and 0.20 g/bhp-hr).</p> <p>All years: Trucks hauling materials such as debris or fill shall be fully covered while in operation off Port property.</p>					

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		<p>In addition, all on-road heavy heavy-duty trucks with a GVWR of 19,500 pounds or greater used at the Port of Los Angeles shall be equipped with a CARB verified Level 3 device.</p> <p>This mitigation measure shall be met unless one of the following circumstances exists and the contractor is able to provide proof that any of these circumstances exists:</p> <ul style="list-style-type: none"> • A piece of specialized equipment is unavailable in a controlled form, or within the required Tier level, within the state of California, including through a leasing agreement. • A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available. • A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease. <p>MM AQ-2.3: Electrify Dredge Equipment. All dredging equipment shall be electric where available.</p> <p>MM AQ-2.4: Engine Standards for Harbor Craft Used In Construction. Prior to</p>					

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		<p>December 31, 2010, all harbor craft with category 1 or 2 (C1 or C2) marine engines shall achieve a minimum emission reduction equivalent to a USEPA Tier-2 2004 level nonroad marine engine. Subsequent to January 1, 2011, all harbor craft with C1 or C2 marine engines shall utilize USEPA Tier 3 or cleaner engines.</p> <p>This mitigation measure shall be met unless one of the following circumstances exists and the contractor is able to provide proof that any of these circumstances exists:</p> <ul style="list-style-type: none"> • A piece of specialized equipment is unavailable in a controlled form, or within the required Tier level, within the state of California, including through a leasing agreement. • A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available. • A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease. 					

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		<p>MM AQ-2.5: Additional Fugitive Dust Control. The construction contractor shall further reduce fugitive dust emissions to 90 percent from uncontrolled levels. The Project construction contractor shall specify dust-control methods that will achieve this control level in a SCAQMD Rule 403 dust control plan. Their duties shall include holiday and weekend periods when work may not be in progress. Measures to reduce fugitive dust include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Active grading sites shall be watered one additional time per day beyond that required by Rule 403. • Contractors shall apply approved non-toxic chemical soil stabilizers according to manufacturer's specifications to all inactive construction areas or replace groundcover in disturbed areas (previously graded areas) inactive for ten days or more. • Construction contractors shall provide temporary wind fencing around sites being graded or cleared. • Trucks hauling dirt, sand, or gravel shall be covered or shall maintain at least 2 feet of freeboard in accordance with Section 23114 of the California Vehicle Code. ("Spilling Loads on Highways"). • Construction contractors shall install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off tires of vehicles and any equipment leaving the construction site. • Pave road and road shoulders. • Require the use of clean-fueled sweepers pursuant to SCAQMD Rule 1186 and Rule 1186.1 certified street sweepers. Sweep streets at the end of each day if visible soil 					

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		<p>is carried onto paved roads on-site or roads adjacent to the site to reduce fugitive dust emissions.</p> <ul style="list-style-type: none"> • Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM₁₀ generation. • Traffic speeds on all unpaved roads shall be reduced to 15 mph or less. • Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow. • Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the extent practicable. • Require the use of electrified truck spaces for all truck parking or queuing areas if feasible. Alternatively, trucks could be required to turn off if parked or stopped in idle for more than 15 minutes. • The grading contractor shall suspend all soil disturbance activities when winds exceed 25 mph or when visible dust plumes emanate from a site; disturbed areas shall be stabilized if construction is delayed. <p>MM AQ-2.6: Additional Best Management Practices (BMPs). The following types of measures are required on construction equipment (including on-road trucks), where feasible:</p> <ul style="list-style-type: none"> • Use of diesel oxidation catalysts and catalyzed diesel particulate traps. • Maintain equipment according to manufacturers' specifications. • Restrict idling of construction equipment and on-road heavy-duty trucks to a maximum of 5 minutes when not in use. 					

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		<ul style="list-style-type: none"> • Install high-pressure fuel injectors on construction equipment vehicles. • Maintain a minimum buffer zone of 300 meters between truck traffic and sensitive receptors • Improve traffic flow by signal synchronization • Enforce truck parking restrictions • Provide on-site services to minimize truck traffic in or near residential areas, including, but not limited to, the following services: meal or cafeteria services, automated teller machines, etc. • Re-route construction trucks away from congested streets or sensitive receptor areas • Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site. • Use electric power in favor of diesel power where available. <p>LAHD shall coordinate with USACE to implement a process by which to select additional BMPs to further reduce air emissions during construction. The LAHD, in coordination with USACE, shall determine the BMPs once the contractor identifies and secures a final equipment list. The final BMPs shall be implemented by including mitigation measures in the Plan and Specifications and in the project stormwater pollution prevention plan (SWPPP). All BMPs shall be incorporated into the plan and specifications that the construction contractor will follow will be monitored by USACE's Environmental Resources Branch to ensure that mitigation measures are implemented during construction. The final</p>					

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		construction equipment list can be determined after selection of the construction contractor. This mitigation is not quantified in this study. The final BMPs shall be monitored by Environmental Resources Branch and implemented through USACE's Engineering Division in the construction contract.					
	AQ-3. Emissions of NOx would substantially contribute to an existing or projected air quality standard violation.	MM AQ-2.1: Construction Equipment tandards. MM AQ-2.2: Fleet Modernization for On-Road rucks. MM AQ-2.3: Electrify Dredge Equipment. MM AQ-2.4: Engine Standards for Harbor Craft sed In Construction MM AQ-2.5: Additional Fugitive Dust Control. MM AQ-2.6: Additional Best Management Practices (BMPs).	Same as above.	Same as above.	Same as above.	Same as above.	NO2 ambient impacts would remain significant after mitigation
Biological Resources California least tern	BIO-1. Construction of the CSWH Expansion Area could adversely affect least tern foraging.	MM BIO-1: Limit Turbidity Plume. Unless specifically allowed by the USFWS, as appropriate, the LAHD/USACE shall not allow turbidity from the dredge and fill activities to extend over greater than 6.5-acres of shallow (i.e., less than 20 feet [6 m] deep) Outer Harbor waters during the April-to-September nesting season of the California least tern. This requirement shall be monitored as provided for in mitigation measure BIO-2 below and shall be based on visually observed differences between ambient surface water conditions and any dredging turbidity plume.	During construction of the containment dikes and placement of fill while the California least terns are nesting on Pier 400 (approximately April through August).	Construction: USACE/Port.	Approx. 10 months or until construction is completed.	Monitoring shall be daily during work when the least terns are nesting or less frequently if determined appropriate by the least tern expert.	Mitigation expected to avoid impacts to least tern foraging due to CSWH Expansion Area construction. <i>Less than significant</i>

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		<p>This measure shall be included in the plan and specifications.</p> <p>MM BIO-2: Least Tern Nesting Monitoring. The LAHD/USACE shall provide a qualified California least tern biologist, acceptable to the USFWS and CDFG, as appropriate, to monitor and manage known California least tern colonies foraging in the immediate vicinity of the existing Cabrillo Shallow Water Habitat during the nesting season. This program shall be carried out for up to one year following construction of the last element of the Port of Los Angeles Channel Deepening Project. The biologist shall coordinate with CDFG and USFWS, pursuant to the existing California least tern MOA (LAHD et al., 2006) and shall:</p> <ul style="list-style-type: none"> a) Monitor nesting and fledgling success of the California least tern colony and provide an annual report in the format provided in previous years. b) Provide an education program for construction crews regarding the identity of the California least tern and their nests, restricted areas and activities, actions to be taken if California least tern nesting sites are found outside the designated California least tern nesting sites (e.g., Southwest Slip surcharge area). c) Assist the USFWS and CDFG in predator control, prior to and during the California least tern nesting season during the construction period. d) Visually monitor and report to the USACE field representative and Environmental Resources Branch biologist any turbidity from project dredging which extends over 					

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		<p>greater than 6.5 acres (2.6 ha) of shallow Outer Harbor waters.</p> <p>This measure shall be included in the plan and specifications.</p> <p>MM BIO-3: Protect Least Tern Nesting Sites. If California least tern nests are found outside of the known least tern colonies during construction, the biologist shall determine the affected area and notify the USACE field representative and Environmental Resources Branch biologist, and USACE shall halt work as appropriate. The USACE shall notify the USFWS and CDFG immediately. The USACE will then determine any potential effect to the California least tern and consult with the USFWS pursuant to Section 7 of the ESA as appropriate.</p>					
<p>Biological Resources</p> <p>Salt Marsh Essential Fish Habitat</p>	<p>BIO-2. Substantial reduction or alteration of a state-, federally-, or locally-designated natural habitat, special aquatic site, or plant community.</p>	<p>MM BIO-4: Transplant Pickleweed. Pickleweed in areas to be filled at the Northwest Slip shall be salvaged prior to filling and replanted at a 1:1 mitigation ratio in suitable habitat in the harbor or off site. A final mitigation plan consistent with USACE habitat mitigation and monitoring guidelines will be prepared prior to permit issuance and the Record of Decision for the Proposed Action.</p> <p>MM-BIO-5 Apply Mitigation Credits. The POLA shall offset the loss of marine habitat from the Berths 243-245 disposal site and Northwest Slip site by using existing mitigation credits from the Bolsa Chica Mitigation Bank, in accordance with provisions of the Memorandum of Agreement (MOA) governing its use. The loss of 12.4 acres (5.0 ha) of</p>	<p>Prior to construction.</p> <p>Approximate number of credits shall be reserved and actual number of credits debited after as-built surveys are completed.</p>	USACE/Port	NA	NA	<p>Transplant would offset loss impacts.</p> <p>Credits would completely offset impacts.</p> <p><i>Less than significant</i></p>

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		Inner Harbor habitat from Berths 243-245 and the Northwest Slip would require 6.2 credits (acres) (calculated at 0.5 credits per acre of Inner Harbor habitat lost) <u>from that bank.</u>					
Biological Resources Marine habitat	BIO-5. Permanent loss of marine habitat from the Berths 243-245 and the Northwest Slip fill	MM-BIO-5 Apply Mitigation Credits. Full description presented above for Impact BIO-2	Approximate number of credits shall be reserved and actual number of credits debited after as-built surveys are completed.	USACE/Port	NA	NA	Credits would completely offset impacts. <i>Less than significant</i>
Land Use	Construction would significantly restrict or prohibit existing land and water-based uses and operations within and adjacent to the Northwest Slip disposal site.	MM-LU-1 Provide advance notification of dredging and disposal operations to affected Port leaseholders. Provide the name and contact information of a Port-employed representative to report conflicts.	Construction: 60 days prior to the start of construction. Future Maintenance: Not applicable.	POLA Future Maintenance: Not applicable.	Construction: Throughout the construction period. Future Maintenance: Not applicable.	Construction: As necessary to respond to reported conflicts. Future Maintenance: Not applicable.	Construction: Less than significant. Future Maintenance: Not applicable.
	Disposal activities at the Northwest Slip would displace existing land and water-based uses and operations for the duration of construction.	MM-LU-2 Provide affected Port leaseholders with reasonable alternative sites for their operations for the duration of disposal activities. Ensure relocation of displaced leaseholders to their pre-disposal locations following completion of construction.	Construction: 60 days prior to the start of construction. Future Maintenance: Within 30 days following construction.	POLA Future Maintenance: POLA	Construction: Throughout the construction period Future Maintenance: Within 30 days following construction.	Construction: Throughout the construction period Future Maintenance: Within 30 days following construction	Construction: Less than significant Future Maintenance: Less than significant
Noise	NOI-1. Sediment disposal activities at the Berths 243-245 disposal	MM NOI-1: Temporary Construction Noise Control. The Port shall require that the following noise control measures be provided prior to start of proposed demolition and	Throughout demolition and sediment placement	POLA Engineering Division/ USACE	Construction: Throughout demolition and sediment	Construction: Prior to the start of demolition	Less than significant

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	site would have the potential to result in significant short-term noise impacts to Fire Station No. 111.	<p>sediment disposal operations at the Berths 243-245 disposal site, and that the measures be implemented throughout proposed demolition and sediment disposal operations.</p> <ul style="list-style-type: none"> A temporary solid fence or similar barrier at least eight feet in height shall be provided between the construction site and Fire Station No. 111 to minimize short-term, construction-related noise impacts. The noise barrier shall be constructed of one half inch-thick plywood (or other material of comparable thickness) and there shall be no gaps in the barrier. The barrier shall be placed as close to the construction site as possible. Construction material, equipment and vehicle staging areas shall be located as far from Fire Station No. 111 as practicable. Portable or stationary equipment, such as but not limited to generators, air compressors and saws, shall be located as far from Fire Station No. 111 as practicable. <p>All construction equipment shall be maintained with engine covers, shields, mufflers and screening as provided by the manufacturer.</p>	activities.		placement activities. Future Maintenance: Throughout demolition and sediment placement activities.	and sediment placement activities. Thereafter, weekly until demolition and sediment placement activities are concluded. Inspections are to be made in response to complaints.	
Noise	NOI-2. Construction noise resulting from the use of the Anchorage Road Soil Storage Site under Alternative 2 would have the potential to result in significant short-term	MM NOI-2: Noise Attenuation Measures. Sediment disposal activities at the Anchorage Road Soil Storage Site shall not occur within 400 feet of the western boundary of the disposal site. If this is not possible, the environmental monitor shall ensure that a berm of at least ten (10) feet in height is constructed between the western boundary of the disposal site and active disposal operations.	Throughout sediment placement activities.	POLA Engineering Division/ USACE	Construction: Throughout sediment placement activities. Future Maintenance: Throughout sediment placement	Construction: Prior to the start of sediment placement activities. Thereafter, weekly until sediment placement activities are concluded.	Less than significant

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	construction noise impacts to sensitive noise receptors located west of the disposal site.				activities.	Inspections are to be made in response to complaints.	

Note: As appropriate the above mitigation measures would be incorporated into the Plan and Specifications.