

TRANSMITTAL 4: Channel Deepening Mitigation List

Port of Los Angeles Channel Deepening Project Mitigation Measures

AIR QUALITY

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.

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.

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.

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:

- 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.

These measures are consistent with the Port's Sustainable Construction Guidelines. The analysis of this mitigation therefore determined the emission reductions associated with the use of Tier 2 emission standards and CARB Level 3 PM control devices on all construction equipment. If construction were to extend beyond 2011, this approach would provide conservative results, as equipment at this time would have to comply with more restrictive emission standards.

Use of equipment with cleaner Tier 2 emission standards would produce fewer air emissions, compared to the statewide average fleet of construction equipment that was assumed in the unmitigated emission calculations. The emission reductions associated with this mitigation measure would be as high as 68 percent, depending upon the pollutant and equipment horsepower category. Although all new equipment

sold by 2006 would have to comply with the Tier 2 standards, these requirements do not apply to older units in the existing equipment fleet. Therefore, this mitigation measure would force an earlier turnover of the existing construction equipment to lower-emitting models. The mitigated air quality also evaluated implementation of ARB Level 3 PM control devices on all construction equipment, which would reduce DPM emissions by 85 percent from Tier 2 standard levels.

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).

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).

All years: Trucks hauling materials such as debris or fill shall be fully covered while in operation off Port property.

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.

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:

- 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 construction 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 construction 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.

These measures are consistent with the Port's Sustainable Construction Guidelines. The analysis of this mitigation therefore determined the emission reductions associated with the use of USEPA 2004 on-road emission standards and CARB Level 3 PM control devices on all on-road heavy-duty trucks with a GVWR of 19,500 pounds or greater. If construction were to extend beyond 2011, this approach would provide conservative results, as trucks at this time would have to comply with more restrictive emission standards.

MM AQ-2.3: Electrify Dredge Equipment. All dredging equipment shall be electric where available.

MM AQ-2.4: Engine Standards for Harbor Craft Used In Construction.

Prior to December 31, 2010: All harbor craft with a-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.

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:

- 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 construction 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 construction 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.

These measures are consistent with the Port's Sustainable Construction Guidelines. The analysis of this mitigation therefore determined the emission reductions associated with the use of Tier 2 emission standards on all proposed tug boats.

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:

- 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 is carried onto paved roads on-site or roads adjacent to the site to reduce fugitive dust emissions.
- 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.

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:

- 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.
- 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.

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 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 USACE's Environmental Resources Branch and implemented through USACE's Engineering Division in the construction contract.

BIOLOGICAL RESOURCES

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.

MM BIO-2: Least Tern Nesting Monitoring.

The LAHD/USACE shall provide a qualified least California 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:

- Monitor nesting and fledgling success of the California least tern colony and provide an annual report in the format provided in previous years.
- 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).
- Assist the USFWS and CDFG in predator control, prior to and during the California least tern nesting season during the construction period.
- Visually monitor and report to USACE field representative and Environmental Resources Branch (ERB) biologist any turbidity from project dredging which extends over greater than 6.5 acres (2.6 ha) of shallow Outer Harbor waters.

MM BIO-3: Protect Least Tern Nesting Sites.

If California least tern nests are found outside of the known California least tern colonies during construction, the biologist shall determine the affected area and notify the USACE field representative and Environmental Resources Branch (ERB) 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.

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.

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 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) from that bank.

LAND USE

MM LU-1: Advance Notification.

The Port shall provide a minimum of 60 days advance notice of any construction-related activities to leaseholders directly affected by, or in close proximity to, construction. The notification shall include the name and contact information of a Port-employed representative for the purpose of allowing leaseholders to report concerns regarding potential conflicts with, or preclusions of, their site-specific operations and uses. The Port shall respond to all complaints or concerns within a 72-hour period.

MM LU-2: Alternative Sites During Construction.

At least 60 days prior to the start of construction, the Port shall identify and make available reasonable alternative sites and facilities to affected leaseholders whose operations and uses are directly displaced by construction-related activities. The Port shall ensure that the alternative locations identified for displaced leaseholders and their operations are maintained for the duration of construction. The Port shall additionally ensure that within 30 days of the completion of construction, the leaseholders displaced by construction are provided with the option to return to their pre-construction Port locations without modification to their pre-construction lease-specific agreements.

NOISE

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 sediment disposal operations at the Berths 243-245 disposal site, and that the measures be implemented throughout proposed demolition and sediment disposal operations.

- 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.
- All construction equipment shall be maintained with engine covers, shields, mufflers and screening as provided by the manufacturer.

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.

Modifications to or Additional Mitigation Measures in the Final SEIR

The following mitigation measures were either added to or modified in the Final SEIR. New text is denoted by underlining while deleted text is denoted by ~~striketrough~~.

Air Quality

MM AQ-2.1: ~~Fleet Modernization for Construction Equipment Standards.~~

~~Construction equipment shall adhere to the following requirements:~~

- ~~1. Construction equipment shall incorporate, where feasible, emissions savings technology such as hybrid drives **and** specific fuel economy standards.~~
- ~~2. Idling shall be restricted to a maximum of 5 minutes when not in use.~~

The following

Prior to and including December 31, 2011~~**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 ~~met~~ retrofitted with a CARB-certified Level 3 diesel emissions control device.

From January 1, 2012 through December 31, 2014: All off-road diesel-powered construction equipment greater than 50 horsepower (~~hp~~) Hp shall meet Tier ~~3~~ 2 emission nonroad emission standards, at a minimum and shall be retrofitted with a CARB-certified Level 3 diesel emissions control device.

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.

- ~~i. All construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by CARB.~~

~~Any emissions control device used by the Contractor shall achieve emissions reductions no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similar sized engine as defined by CARB regulations.~~

- ~~ii. A copy of each unit's certified Tier specification, BACT documentation and each unit's CARB or SCAQMD operating permit, shall be provided at the time of mobilization of each applicable unit of equipment.~~

The above "Tier Specifications" measures 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:

- 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.

These measures are consistent with the Port's Sustainable Construction Guidelines. The analysis of this mitigation therefore determined the emission reductions associated with the use of Tier 2 emission standards and CARB Level 3 PM control devices on all construction equipment. If construction were to extend beyond 2011, this approach would provide conservative results, as equipment at this time would have to comply with more restrictive emission standards.

Use of equipment with cleaner Tier 2 emission standards would produce fewer air emissions, compared to the statewide average fleet of construction equipment that was assumed in the unmitigated emission calculations. The emission reductions associated with this mitigation measure would be as high as 68 percent, depending upon the pollutant and equipment horsepower category. Although all new equipment sold by 2006 would have to comply with the Tier 2 standards, these requirements do not apply to older units in the existing equipment fleet. Therefore, this mitigation measure would force an earlier turnover of the existing construction equipment to lower-emitting models. The mitigated air quality also evaluated implementation of ARB Level 3 PM control devices on all construction equipment, which would reduce DPM emissions by 85 percent from Tier 2 standard levels.

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 Gmg/bhp-hr PM10 and 2.0 Gmg/bhp-hr NOx). ~~In addition, all on-road trucks shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the Contractor shall achieve emissions reductions no less than what could be achieved by a Level 3 diesel emissions control strategy for a similar sized engine as defined by CARB regulations.~~

~~A copy of each unit's certified, USEPA rating, BACT documentation, and each unit's CARB or SCAQMD operating permit, shall be provided at the time of mobilization of each applicable unit of equipment.~~

~~The above "USEPA Standards" measures shall be met.~~ **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).

All years: Trucks hauling materials such as debris or fill shall be fully covered while in operation off Port property.

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.

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:

- A piece of specialized equipment is unavailable in a controlled form, or within the State required Tier level, within the state of California, including through a leasing agreement.

- A construction 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 construction 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.

~~The mitigated air quality assumed that all project on-road heavy-duty trucks with a GVWR of 19,500 pounds or greater (1) would comply with~~ These measures are consistent with the Port's Sustainable Construction Guidelines. The analysis of this mitigation therefore determined the emission reductions associated with the use of USEPA 2004 on-road emission standards and (2) would implement CARB Level 3 PM control devices, which would reduce DPM emissions by 85 percent from 2004 standard levels, on all on-road heavy-duty trucks with a GVWR of 19,500 pounds or greater. If construction were to extend beyond 2011, this approach would provide conservative results, as trucks at this time would have to comply with more restrictive emission standards.

MM AQ-2.3: Electrify Dredge Equipment.

All dredging equipment shall be electric where available. ~~The mitigated air quality assumed that the main hoist and generator engines on proposed clamshell barges that (1) dredge, (2) remove surcharge from the Southwest Slip, and (3) unload surcharge at the Northwest Slip would replace diesel power with electrical grid power (the hydraulic dredge main engines would be electrified under the unmitigated scenario).~~ Since there are currently no hydraulic or clamshell dredge barges that are completely electric, the mitigated analysis assumes that it is infeasible to electrify all auxiliary diesel-powered equipment on these barges, such as those used for anchor winches and deck generators. Additionally, due to the inaccessibility of the CSWH and Eelgrass sites, clamshell dredges that operate in this location would be unable to connect to the electrical grid.

MM AQ-2.4: Engine Standards for Harbor Craft Used In Construction.

~~Prior to December 31, 2010, all harbor craft with a category 1 or 2 (C1 or C2) marine engines shall meet U.S. achieve a minimum emission reduction equivalent to a USEPA Tier-2 2004 level nonroad marine engine emission standards. The mitigated air quality assumed that all proposed tug boats would comply with the Tier 2 category. Subsequent to January 1, 2011, all harbor craft with C1 or C2 marine engine emission standards.~~ engines shall utilize USEPA Tier 3 or cleaner engines.

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:

- 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 construction 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 construction 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.

These measures are consistent with the Port's Sustainable Construction Guidelines. The analysis of this mitigation therefore determined the emission reductions associated with the use of Tier 2 emission standards on all proposed tug boats.

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 ~~and implement~~ dust-control methods that will achieve this control level in a SCAQMD Rule 403 dust control plan. ~~The construction contractor shall designate personnel to monitor the dust control program and to order increased watering, as necessary, to ensure a 90 percent control level.~~ 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:

~~The following fugitive dust reduction measures, at a minimum, shall be included in this plan: SCAQMD's Best Available Control Technology (BACT) measures shall be followed on all projects. They are outlined in Table 1 in Rule 403. Large construction projects (on a property which contains 50 or more disturbed acres) shall also follow the BACT measures in Tables 2 and 3 of Rule 403.~~

- ~~Active grading sites shall be watered four times~~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.~~
- ~~The grading contractor shall suspend all soil disturbance activities when winds exceed 25 miles per hour (mph) or when visible dust plumes emanate from a site; disturbed areas shall be stabilized if construction is delayed.~~
- ~~Open storage piles (greater than 3 feet tall and a total surface area of 150 square feet) shall be covered with a plastic tarp or chemical dust suppressant.~~

- ~~Stabilize the materials while loading, unloading and transporting to reduce fugitive dust emissions.~~
- ~~Belly dump truck seals shall be checked regularly to remove trapped rocks to prevent possible spillage.~~
- ~~Comply with track out regulations and provide water while loading and unloading to reduce visible dust plumes.~~
- ~~Waste materials shall be hauled off site immediately.~~
- ~~The calculation of fugitive dust (PM10) from project earth moving activities assumes a 75 percent reduction from uncontrolled levels to simulate rigorous watering of the site and use of other measures (listed below) to ensure project compliance with SCAQMD Rule 403. The construction contractor shall further reduce fugitive dust emissions to 90 percent from uncontrolled levels.~~
- 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 is carried onto paved roads on-site or roads adjacent to the site to reduce fugitive dust emissions.
- 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.

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:

- 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.
- 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.

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 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 USACE's Environmental Resources Branch and implemented through USACE's Engineering Division in the construction contract.

~~Since the final construction equipment list has not yet been determined, this mitigation is not quantified in this study.~~

Biology

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.

MM BIO-5: Apply Mitigation Credits.

The POLA shall offset the loss of marine habitat from the ~~Eelgrass Habitat Area above water portion of the containment dike, 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 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) from that bank. The loss of 1.7 acres (0.7 ha) of shallow water from the Eelgrass Habitat Area above water portion of the containment dike would require no more than 2.6 Outer Harbor Bank credits (calculated at 1.5 credits for each acre of shallow habitat lost; this conservatively

DRAFT Mitigation List: *Document considered draft until Board considers document*

~~assumes that all of the dike would be on shallow Outer Harbor habitat (1.5:1), but a portion is on deep (1:1) and will be debited from available credits in the Bolsa Chica Mitigation Bank (as of June 2008, approximately 106 credits are available in this bank).~~