TABLE OF CONTENTS

TABLES

This page intentionally left blank

7.0 MITIGATION MONITORING AND REPORTING PROGRAM

7.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code (PRC) section 21081.6 (enacted by the passage of Assembly Bill 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.
- The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.
- A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- Prior to the close of the public review period for a Draft Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND), a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures that mitigate impacts to resources that are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the

responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

7.2 MITIGATION MONITORING PROCEDURES

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in compliance with California Environmental Quality Act (CEQA) PRC section 21081.6. It describes the requirements and procedures to be followed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to ensure that all mitigation measures adopted as part of the proposed project will be carried out as described in this Program EIR (PEIR).

Table 7-1 lists each of the mitigation measures specified in this PEIR and identifies the party or parties responsible for implementation and monitoring of each measure.

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
4.1 Traffic and Circulation			
Mitigation Measure 4.1.1:	Should one or more of Staging Areas 1 through 4 be selected, the contractor shall require, and the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify, that the project-related truck traffic is routed on Harbor Drive (southbound) to the Civic Center Drive access to Interstate 5 (I-5) for the duration of the dredge-and-haul activity. Haul, delivery, and employee traffic shall be discouraged at the I-5 southbound ramp/Boston Avenue intersection and on the roadway segment of Boston Avenue between 28th Street and the I-5 southbound ramp.	San Diego Water Board	Ongoing during the dredge and haul activity
Mitigation Measure 4.1.2:	Should Staging Area 5 be selected, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall consult with the San Diego Association of Governments (SANDAG) and the San Diego Unified Port District (Port District) on the implementation status of Segment 5 of the Bayshore Bikeway in order to locate the staging activity away from the planned bike path. The consultation shall include information regarding the specific location, configuration, and operation of the temporary staging area, as well as appropriate bikeway safety and access considerations. If Staging Area 5 is selected, the contractor shall implement the staging area as agreed to by the agencies.	San Diego Water Board, in consultation with SANDAG and the Port District	Ongoing during the dredge and haul activity
Mitigation Measure 4.1.3:	Should one or more of Staging Areas 1 through 4 be selected, the shipyards, in consultation with the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), San Diego Unified Port District (Port District), and City of San Diego, shall prepare a Parking Management Plan (PMP) to identify appropriate substitute parking areas, shuttles, and commuter routes, as necessary, to meet the need created by the short-term loss of employee parking spaces. The need for off-site parking shall be based on anticipated employment during the dredge period (which may be reduced compared to existing conditions as a result of the dredge activity displacing some ship building/repair activity), and the loss of parking in the selected staging area. The PMP shall be approved by the City of San Diego Traffic Engineer prior to the initiation of dredging, and	Shipyards, in consultation with the San Diego Water Board, the Port District and the City of San Diego	Plan approval prior to the initiation of dredging, and implementation ongoing during the dredge and haul activity

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	its implementation shall be verified by the San Diego Water Board.		
4.2 Hydrology and Water Quality			
Mitigation Measure 4.2.1:	During dredging operations, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify that the contractor/dredge operator is using automatic rather than manual monitoring of the dredging operations, which will allow continuous data logging with automatic interpretation and adjustments to the dredging operations for real-time feedback for the dredge operator. Automatic systems shall also be used to monitor turbidity and other water quality conditions in the vicinity of the dredging operations to facilitate real-time adjustments by the dredging operators to control temporary water quality effects. The automatic systems shall include threshold level alarms so that the operator or other appropriate project personnel recognize that a particular system within the operation has failed. If the threshold-level alarms are activated, the dredge operator shall immediately shut down or modify the operations to reduce water quality constituents to within threshold levels. The San Diego Water Board shall further verify that the contractor/dredge operator is using visual monitoring and recording of water turbidity during the dredging operations, including the temporary cessation of dredging if exceedances of the turbidity objective in the Basin Plan occur. Water quality sampling for contaminants of concern (COCs) shall be required if silt curtains are not deployed during any phase of the in-water activities.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging operations
Mitigation Measure 4.2.2:	During dredging operations, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify that the dredge contractor is implementing standard Best Management Practices (BMPs) for minimizing resuspension, spillage, and misplaced sediment during dredging operations, as the deposition of such material would increase turbidity and compromise cleanup efforts. Such BMPs shall include, but not be limited to, the following:	Contractor, as verified by the San Diego Water Board	Ongoing during dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
• The contractor shall not stockpile material on the bottom of the San Diego Bay floor and shall not sweep or level the bottom surface with the bucket. • The contractor shall use and maintain double silt curtains that encircle the area of dredging and shall minimize the times in which these curtains are temporarily opened, to contain suspended sediments. • The contractor shall use air curtains in conjunction with silt curtains to contain re-suspended sediment, to enhance worker safety, and allow barges to transit into and out of the work area without the need to open and close silt curtain gates. • The contractor shall ensure the environmental clamshell bucket is entirely closed when withdrawn from the water and moved to the barge. This action requires extra attention when debris is present to make sure debris does not prevent the bucket from completely closing. Two closure switches shall be on each side of the bucket near the top and bottom to provide an electrical signal to the operator that the bucket is closed. Use of the switches shall minimize the potential of sediment leaking from the bucket into the water column during travel to the surface. • The contractor shall not overfill the digging bucket because overfill results in material overflowing back into the water. Use of instrumentation such as Clam Vision® shall allow the operator to visualize in real time the depth of cut that shall be designed to prevent overfilling. • The contractor shall utilize wide-pocket material barges having watertight containments to prevent return water from re-entering San Diego Bay. The contractor shall not overfill the material barge to a point where overflow or spillage could occur. Each material barge shall be marked in such a way to allow the operator to visually identify		

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	the maximum load point. The marking should allow sufficient interior freeboard to prevent spillage in rough water such as ship wakes during transit. Initiating the material barge marking shall minimize impact of load spillage during transit to the unloading area. • The contractor shall not use weirs as a means to dewater the scow and shall allow additional room for sediment placement. Preventing this action shall minimize the introduction of turbidity to the water column. • The contractor shall place material in the material barge such that splashing or sloshing does not occur, which could send sediment back into the water. Splashing can be controlled by restricting the drop height from the bucket. • If the use of a grate to collect debris is required, the contractor shall not allow material to pile up on the grid and flow or slip from the grid back into the water. The debris scalper shall be positioned in such a way as to be totally contained on the shore side of the unloading operations. The dredge operator shall visually monitor for debris build-up and alert the support personnel on the barge to assist in clearing the debris, as necessary. Debris that is derived from dredging activities shall be removed from the grate by the environmental clamshell bucket and placed in a contained area on the dredge barge or in a second material barge for subsequent removal to the onshore dewatering facility. • The contractor shall restrict barge movement and work boat speeds (i.e., reducing propeller wash) in the dredge area. The remedial design should identify the various areas where this operational control should be used.		
Mitigation Measure 4.2.3:	During dredging operations, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify that the contractor is deploying inner- and outer-boundary floating silt curtains fully around the dredging area at all times. Double silt curtains shall be utilized	Contractor, as verified by the San Diego Water Board	Ongoing during dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	for containment of the dredge area; configurations, technologies, and actual locations of silt curtains in relation to the dredge barge shall be finalized during the design phase of the project. The floating silt curtain shall be comprised of connected lengths of Type III geotextile fabric. A continuous length of floating silt curtain shall be arranged to fully encircle the dredging equipment and the scow barge being loaded with sediment. The silt curtain shall be supported by a floating boom in open water areas (such as along the bay ward side of the dredging areas). Along pier edges, the contractor shall have the option of connecting the silt curtain directly to the structure. The contractor shall continuously monitor the silt curtain for damage, dislocation, or gaps and immediately fix any locations where it is no longer continuous or where it has loosened from its supports. The bottom of the silt curtain shall be weighted with ballast weights or rods affixed to the base of the fabric. Where feasible and applicable, the floating silt curtains shall be anchored and deployed from the surface of the water to just above the substrate. If necessary, silt curtains with tidal flaps may be installed to facilitate curtain deployment in areas of higher flow. Air curtains may be used in conjunction with silt curtains to contain resuspended sediment, enhance worker safety, and allow barges to transit into and out of the work area without the need to open and close silt curtain gates.		
Mitigation Measure 4.2.4:	Throughout the remediation process of dredging and application of the clean sand covers, the contractor shall conduct water quality monitoring to demonstrate that implementation of the remedial activities does not result in violations of water quality objectives in the Basin Plan outside of the construction area. The contractor shall submit weekly water quality reports to the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board). If water quality objectives are violated, the San Diego Water Board may temporarily halt activity and impose additional required measures to protect water quality.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
Mitigation Measure 4.2.5:	Prior to initiation of dredging activities, the contractor shall determine the swing radius of the unloading equipment and shall place a steel plate (swing tray or spill plate) between the material barge and the hard cape to prevent spillage from falling directly into the water. The steel plate shall be sufficiently large enough to cover the swing radius of the unloading equipment. The spill plate shall be designed to prevent any "drippings" from falling between the material barge and dock where the unloading equipment is stationed. The spill plate shall be positioned so that any "dripped" material/water either runs back into the material barge or onto the unloading dock, which shall be lined with an impermeable material and beamed to contain excess sediment/water. The steel plate shall be designed to prevent any water or sediment from re-entering San Diego Bay. As a secondary containment measure, filter fabric material shall be placed over the spill plate and between edges of the barge and unloading dock to prevent any drippings from falling into San Diego Bay. Upon completion of unloading a material barge, the spill plate shall be thoroughly rinsed so that excess sediment is drained into the material barge or onto the unloading dock (depending on spill plate positioning) and then placed on the lined dock until the next unloading sequence. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall be responsible for ensuring adherence to the requirements of this measure.	Contractor, as verified by the San Diego Water Board	Prior to initiation of and ongoing during dredging and sediment unloading operations
Mitigation Measure 4.2.6:	During dredging activities, the contractor shall ensure that the environmental clamshell bucket is entirely closed when withdrawn from the barge and moved to the truck. In addition, the contractor shall ensure that the bucket is completely empty of sediment prior to being moved back to the barge to minimize sediment being spilled over the dock. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall be responsible for ensuring adherence to the requirements of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
Mitigation Measure 4.2.7:	During final design of the clean sand covers, the sand layer thickness shall designed to prevent substantial perturbation (mixing and overturning) of underlying contaminated sediments, erosion (e.g., propeller wash), and the upward chemical migration into the clean sand covers. The clean sand cover design shall physically isolate the sediments from benthic or epigenetic organisms to prevent the uptake of bioaccumulative contaminants (i.e., polychlorinated biphenyls [PCBs]) by aquatic organisms either directly from the sediments or by foraging on benthos. The physical isolation component of the clean sand covers may include separate sub-components for isolation, bioturbation, and consolidation. The clean sand covers shall be designed to stabilize the contaminated sediments being covered and prevent them from being resuspended and transported off site. In addition, the clean sand covers shall be designed to be resistant to erosion, including propeller wash, flow, and tidal-induced erosion. The final engineering plans shall include the source and type of sand required for subaqueous application of the clean sand covers. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall review and have approval authority for the final engineering plans, and shall verify implementation. A regulatory oversight contractor may be used by the San Diego Water Board.	San Diego Water Board	Ongoing during application of clean sand cover
Mitigation Measure 4.2.8:	During application of the clean sand covers, the contractor shall place the initial layers of the clean sand cover in thin lifts by hydraulically placing the material from a barge in order to reduce the vertical impact and lateral spreading of the clean sand cover material and the potential for resuspending the contaminated surface sediments. Controlled placement shall also minimize the mixing of the clean sand covers and underlying sediment by allowing the sediment to slowly gain strength before subsequent layers are deposited. Operational controls such as silt curtains shall also be employed during placement of the clean sand covers. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), with the assistance of a regulatory oversight	Contractor, as verified by the San Diego Water Board	Ongoing during application of clean sand cover

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	contractor, shall be responsible for ensuring adherence to the requirements of this measure.		
Mitigation Measure 4.2.9:	Prior to dredging operations, a Dredging Management Plan (DMP) shall be prepared. The contractor shall implement the measures listed in the DMP during dredging operations. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall be responsible for review and approval of the DMP. The DMP shall contain Standard Operating Procedures (SOPs) for the project to assist the dredge contractor in preventing accidental spills and providing the necessary guidelines to follow in case of an oil or fuel spill. In addition to providing SOPs to prevent accidental oil/fuel spills during construction activities, the DMP shall address the identification of dredging needs, a methodology and process for determining dredging priorities and scheduling, the feasibility and requirements for expedited permitting, Quality Assurance Project Plan (QAPP) to comply with regulatory requirements, alternatives for control and operation of dredging equipment, and Best Management Practices (BMPs) to implement in the event of equipment failure and/or repair. Typical BMPs for equipment failure or repair shall be identified in the DMP and could include: communication to project personnel, proper signage and/or barriers alerting others of potentially unsafe conditions, all repair work to be conducted on land and not over water, repair work involving use of liquids to be performed with proper spill containment equipment (e.g., spill kit), and a contingency plan identifying availability of other equipment or subcontracting options. Furthermore, the DMP shall specify that water discharges to San Diego Bay are prohibited; therefore, the barge shall implement measures necessary to capture all return water and prevent discharge to San Diego Bay. In addition, the DMP shall include, at a minimum, the following measures to prevent accidental oil/fuel spills during construction activities:	Contractor, as verified by the San Diego Water Board	Prior to initiation of and ongoing during dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
• As an operational control element, all oil and fuel shall be housed in a secondary containment structure to ensure that any spill or leakage is prevented from entering the water column. • Personnel involved with dredging and handling the dredged material shall be given training on the potential hazards resulting from accidental oil and/or fuel spills. This operational control shall provide the personnel with an awareness of the materials they are handling as well as the potential impact to the environment. • All equipment shall be inspected by dredge contractor personnel before starting the shift. These inspections are intended to identify typical wear or faulty parts that may contain oil or fuel. • Personnel shall be required to visually monitor for oil or fuel spills during construction activities. • In the event that a sheen or spill is observed, the equipment shall be immediately shut down and the source of the spill identified and contained. Additionally, the spill shall be reported to the applicable agencies presented in the DMP. • The shipyards currently have oil/fuel spill kits located at various locations on site for routine ship repair operations. All personnel associated with dredging activities shall be trained on where these spill kits are located, how to deploy the oil sorbent pads, and proper disposal guidelines. The dredging barge shall have a full complement of oil/fuel spill kits on board to allow for quick and timely implementation of spill containment. • The use of oil booms shall be deployed surrounding the dredging activities. In the event that a spill occurs, the oil and/or fuel shall be contained within the oil boom boundary. This operational control shall be the last line of defense against accidental oil/fuel spill occurrences.		

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	The oil boom shall be deployed along the entire length of the outer silt curtain. The San Diego Water Board shall be responsible for verifying adherence to the requirements of this measure.		
Mitigation Measure 4.2.10:	The containment area constructed around the dewatering containment cell shall be designed to consist of berms (K-rails and/or dry dock blocks) surrounding the area that restrict decanted water/storm water to the land adjacent to the dewatering containment and prevent the water from flowing into San Diego Bay or the water table if a breach in the pad were to occur. If any area(s) adjacent to the dewatering containment cell are unpaved, a liner shall be utilized if necessary to prevent infiltration. The containment cell shall be designed as a "no discharge" facility and in a manner that prevents storm water runoff/run-on from adjacent areas to the cell from entering the dewatering area. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall review and approve the design of the dewatering containment cell and verify its implementation in accordance with approved plans.	Contractor, as verified by the San Diego Water Board	Prior to initiation of and ongoing during dewatering operations
Mitigation Measure 4.2.11:	If a containment liner is used, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify that the contractor has provided a salvaging layer of sand that is properly designed and implemented to provide a visual indicator to the excavator operator that he/she is getting close to the containment liner, or the use of closely spaced K-rails and dry dock blocks at key points (i.e., corners) to prevent the operator from getting to the containment liner, in order to prevent a breach in the dewatering pad.	Contractor, as verified by the San Diego Water Board	Ongoing during dewatering operations
Mitigation Measure 4.2.12:	During dewatering operations, the contractor shall comply with the provisions of the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), and any	Contractor, as verified by the San Diego Water Board	Ongoing during dewatering operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	subsequent permit, as they relate to activities conducted in the staging areas. This shall include submission of the Permit Registration Documents, including a Notice of Intent (NOI), risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and signed certification statement to the State Water Resources Control Board (State Water Board) via the Storm Water Multi-Application and Report Tracking System (SMARTS) at least 7 days prior to the start of dewatering activities at the staging areas. Construction activities shall not commence until a Waste Discharger Identification (WDID) number is received from the SMARTS. The SWPPP shall be prepared by a Qualified SWPPP Developer (QSD); shall meet the requirements of the Construction General Permit; and shall identify potential pollutant sources associated with dewatering activities, identify non-storm water discharges, and identify, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants associated with the construction site. BMPs shall include, but not be limited to, Good Housekeeping, Erosion Control, and Sediment Control. The BMPs identified in the SWPPP shall be implemented during project construction. An Annual Report shall be submitted using the SMARTS no later than September 1 of each year during dewatering operations. A Notice of Termination (NOT) shall be submitted to the State Water Board within 90 days of completion of dewatering activities and stabilization of the site. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall be responsible for verifying the contractor's adherence to the requirements of this measure.		
Mitigation Measure 4.2.13:	Prior to any discharge to the sanitary sewer system, the contractor shall ensure that the decanted water is analytically tested following the discharge requirements for the San Diego Publically Owned Treatment Works (POTW). If water samples exceed the City of San Diego requirements for discharge of wastewater to the sanitary sewer system, the water shall be taken off site for treatment and subsequent disposal. In addition, the contractor shall comply with any limits on pollutant concentrations,	Contractor, as verified by the San Diego Water Board	Prior to any discharge to the sanitary sewer system

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	discharge times, and flow rates required by the City of San Diego. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall be responsible for verifying the contractor's adherence to the requirements of this measure.		
Mitigation Measure 4.2.14:	The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall coordinate water quality monitoring efforts and share water quality monitoring data with other dredging projects in San Diego Bay throughout the duration of the project. Considerations for the issuance of dredge permits or General Waste Discharge Requirements (WDRs) shall include distance(s) between sites and proposed timing of in-water activities that shall involve potential impacts to water quality, selection of appropriate water quality reference sampling locations in San Diego Bay, configuration of silt curtains, and coordination of expected commercial and recreational vessel traffic.	San Diego Water Board	Ongoing during dredging operations
4.3 Hazards and Hazardous Waste			
Mitigation Measure 4.3.1:	**Secondary Containment.** As an operational control element, the contractor shall ensure, and the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) will verify, that all oil and fuel is housed in a secondary containment structure to ensure that spilled or leaked oil or fuel will be prevented from entering the water column.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging and dewatering operations
Mitigation Measure 4.3.2:	**Dredging Management Plan.** The contractor shall ensure that a Dredging Management Plan (DMP) containing Standard Operating Procedures (SOPs) for the project is developed prior to the initiation of dredging and implemented for the duration of the dredging activity. The DMP will include the following measures to prevent release of hazardous materials during construction activities: • Personnel involved with dredging and handling the dredged material will be given training on their specific task areas, including:	Contractor, as verified by the San Diego Water Board	Prior to and ongoing during dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
o Potential hazards resulting from accidental oil and/or fuel spills; o Proper dredging equipment operation; and o Proper silt curtain deployment techniques. • All equipment will be inspected by the dredge contractor and equipment operators before starting the shift. These inspections are intended to identify typical wear or faulty parts. • Required instrumentation to avoid spillage of dredging material will be identified for each piece of equipment used during dredging operations. • Personnel will be required to visually monitor for oil or fuel spills during construction activities. • In the event that a sheen or spill is observed, the equipment will be immediately shut down and the source of the spill identified and contained. Additionally, the spill will be reported to the applicable agencies presented in the DMP. • All personnel associated with dredging activities will be trained as to where oil/fuel spill kits are located, how to deploy the oil-absorbent pads, and proper disposal guidelines. The dredging barge shall have a full complement of oil/fuel spill kits on board to allow for quick and timely implementation of spill containment. • The use of oil booms will be deployed surrounding the dredging activities. In the event that a spill occurs, the oil and/or fuel will be contained within the oil boom boundary. The oil boom shall be deployed along the entire length of the outer silt curtain. • Shallow areas along the haul route will be mapped and provided to the dredge operator for review. These areas will be avoided to the extent possible to prevent propeller wash resuspension of sediment.		

Table 7-1: Mitigation and Monitoring Reporting Program

	Mitigation Measures	Responsible Party	Timing for Mitigation Measure
	• Load-controlled barge movement, line attachment, and horsepower requirements of tugs and support boats at the project site will be specified to avoid resuspension of sediment. • Barge load limits and loading procedures will be identified, and the appropriate draft level will be marked on the materials barge hull. Implementation of the DMP will be verified by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board).		
Mitigation Measure 4.3.3:	**Contingency Plan.** The contractor shall ensure that a Contingency Plan has been developed prior to the initiation of dredging and implemented for the duration of the dredging activity to address equipment and operational failures that could occur during dredging operations. The Contingency Plan will include the following measures to prevent release of hazardous materials during construction activities: • Actions to implement in the event of equipment failure, repair, or silt curtain breach. These include: o Communication to project personnel; o Proper signage and/or barriers alerting others of potentially unsafe conditions; o Specification for repair work to be conducted on land and not over water; o Identification of proper spill containment equipment (e.g., spill kit); o A plan identifying availability of other equipment or subcontracting options;	Contractor, as verified by the San Diego Water Board	Prior to and ongoing during dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	o Emergency procedures to follow in the event of a silt curtain breach; o Incident reporting and review procedure to evaluate the causes of an accidental silt curtain breach and steps to avoid further breaches; and o Response procedures in the event of barge overfill. Implementation of the Contingency Plan will be verified by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board).		
Mitigation Measure 4.3.4:	**Health and Safety Plan.** The contractor shall ensure that a Health and Safety Plan (H&S Plan) has been developed prior to the initiation of dredging and implemented for the duration of the dredging activity to protect workers from exposure to contaminated sediment. The H&S Plan will include the following requirements at a minimum: • Training for operators to prevent spillage of sediment on the bridges during dredging activities • Training for operators in decontamination and waste containment procedures • Identification of appropriate Personal Protection Equipment (PPE) for all activities, including sediment removal, management, and disposal • Certification of personnel under safety regulations such as Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.120 • Documentation that requires that health and safety procedures have been implemented	Contractor, as verified by the San Diego Water Board	Prior to and ongoing during dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

	Mitigation Measures	Responsible Party	Timing for Mitigation Measure
	Implementation of the H&S Plan will be verified by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board).		
Mitigation Measure 4.3.5:	**Communication Plan.** The contractor shall ensure that a Communication Plan and operational guidelines are developed between the Port of San Diego and/or the Harbor Master and all vessel operators prior to the initiation of dredging to ensure the safe movement of project vessels from the dredge to the unloading area. Features of the Communication Plan will include: • Identification of vessel speed limitations (wake/no wake); and • Notification to project personnel using air horns as necessary. Implementation of the Communication Plan for the duration of the dredging activity will be verified by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board).	Contractor, as verified by the San Diego Water Board	Prior to and ongoing during dredging operations
Mitigation Measure 4.3.6:	**Sediment Management Plan.** The contractor shall implement Best Management Practices (BMPs) and follow Standard Operating Procedures (SOPs) during sediment unloading, transport, drying/dewatering, and disposal operations for the duration of the dredging activity. At a minimum, these BMPs/SOPs will include: • Mechanical stops to limit the swing arm of the crane; • Placement of a spillage plate to prevent any dropped sediment from impacting the water column; • Conveyance of sediment on the spillage plate to a collection sump; • Utilization of a power wash arm to clean sediment from equipment into the collection sump;	Contractor, as verified by the San Diego Water Board	Ongoing during dredging and dewatering operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
• Contractor identification of haul truck load limits on first load each day; • Driver training and enforcement of safe driving procedures; • Only liquid drying agents will be utilized to avoid airborne release of these materials; • Implementation of a dust control and monitoring plan during sediment staging; • The stockpile liner will be protected from excavator penetration by a visual indicator such as sand, or by physical barriers such as railroad rails or K-rails; • Decanted water from sediment and any storm water in the staging area will be managed by sloping the staging area to a common sump or pond (containment cell) or pumped to a series of tanks. The containment device(s) will be designed to meet a performance standard of "no discharge" so that storm water runoff cannot enter the bay or adjacent areas and to ensure that storm water surrounding areas cannot penetrate the containment area. The containment device(s) will be inspected daily during sediment staging. Prior to discharge, the liquid will be tested to evaluate whether it meets discharge criteria for the San Diego Publically Owned Treatment Works (POTW) or if treatment is required prior to discharge; • Sediment loading for transport off site will be conducted in a contained area, and haul trucks will be power washed prior to exit to prevent sediment from being discharged to the bay or surrounding area; and • All hazardous materials (liquid, sediment, or chemicals used during the project) will be handled, transported, and disposed of at the proper disposal facility in accordance with state regulations.		

Table 7-1: Mitigation and Monitoring Reporting Program

	Mitigation Measures	Responsible Party	Timing for Mitigation Measure
	Implementation of these BMPs/SOPs will be verified by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board).		
Mitigation Measure 4.3.7:	**Hazardous Materials Transportation Plan.** Prior to the initiation of dredging, the contractor shall prepare and implement a Hazardous Materials Transportation Plan for the duration of the dredging activity that specifies the following procedures: • Sediment containment procedures • Emergency notification procedures The Hazardous Materials Transportation Plan will be subject to review by, and its implementation will be verified by, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board).	Contractor, as verified by the San Diego Water Board	Prior to and ongoing during dredging and transportation operations
Mitigation Measure 4.3.8:	**Traffic Control Plan.** The contractor shall prepare a Traffic Control Plan that will be developed prior to the initiation of dredging and implemented for off-site transport of the sediment, and will include, but not be limited to, the following information: • Planned haul truck routes • Haul truck escorts, if required • In case of accidental spillage, emergency vehicle access and sediment containment and removal procedures The Traffic Control Plan will be subject to approval by the City of San Diego and/or the National City Traffic Engineer, and implementation for the duration of the dredging activity will be verified by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board).	Contractor, as verified by the San Diego Water Board	Prior to and ongoing during dredging and off-site transportation operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
4.4 Noise			
Mitigation Measure 4.4.1:	The contractor shall ensure, and the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) and City of San Diego Noise Control Officer shall verify, that treatment and haul activity in the City of San Diego is prohibited between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in section 21.04 of the San Diego Municipal Code, with the exception of Columbus Day and Washington's Birthday, or on Sundays, that would create disturbing, excessive, or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator in conformance with San Diego Municipal Code section 59.5.0404.	Contractor, as verified by the San Diego Water Board and City of San Diego Noise Control Officer	Ongoing during treatment and haul operations
Mitigation Measure 4.4.2:	The contractor shall ensure, and the National City Noise Control Officer and California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify, that treatment and haul activity in National City is prohibited between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on weekends or holidays as specified in section 12.10.160 of the City of National City Municipal Code.	Contractor, as verified by the San Diego Water Board and the National City Noise Control Officer	Ongoing during treatment and haul operations
Mitigation Measure 4.4.3:	The contractor shall implement, and the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify, the following for the duration of project implementation (dredging, treatment, and loading) in order to reduce potential construction noise impacts on nearby sensitive receptors: • All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards. • All stationary construction equipment shall be placed so that emitted noise is directed away from sensitive receptors nearest the project site.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging, treatment and loading operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
• All equipment staging shall be located to create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site.		
4.5 Biological Resources		
Mitigation Measure 4.5.1: A pre-construction eelgrass habitat mapping survey for the Shipyard Sediment Site shall be completed by the shipyards within 120 days of the proposed start dates of each project phase in accordance with the Southern California Eelgrass Mitigation Policy (SCEMP) (National Marine Fisheries Service [NMFS], 1991 as amended) to document the amount of eelgrass that will likely be affected by dredging activity. The results of these surveys shall be integrated into a Final Eelgrass Mitigation Plan prepared by the shipyards for the project and used to calculate the amount of eelgrass to be mitigated. The Final Eelgrass Mitigation Plan shall be subject to approval by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) and NMFS, and shall include the following elements: • A detailed map of the area including distribution, density and relationship to depth contours of any eelgrass beds likely to be impacted by project construction. • The identification of mitigation site factors such as distance from project, depth, sediment type, distance from ocean connection, water quality, and currents should be considered in evaluating potential sites. • Techniques for the construction and planting of the eelgrass mitigation site consistent with the best available technology at the time of the project. • Proposed mitigation timing schedule. • Proposed mitigation monitoring activities.	Shipyards, as verified by the San Diego Water Board, in concert with the appropriate resource agencies	Prior to dredging and post-dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
A post-dredging project eelgrass survey shall be completed by the shipyards within 30 days of the completion of each dredging episode in accordance with the SCEMP and shall be submitted to the NMFS, United States Fish and Wildlife Service (U.S. FWS), California Department of Fish and Game (CDFG), and the Executive Director of the California Coastal Commission (CCC), as well as the San Diego Water Board. Criteria for determination of transplant success shall be based upon a comparison of vegetation coverage (area) and density (turions[1] per square meter) between the project adjusted impact area (original impact area multiplied by 1.2 or the amount of eelgrass habitat to be successfully mitigated at the end of 5 years) and the mitigation site(s). The extent of vegetated cover is defined as that area where eelgrass is present and where gaps in coverage are less than 1 meter between individual turion clusters. Density of shoots is defined by the number of turions per area present in representative samples within the original impact area, control or transplant bed. Specific criteria are as follows: • The mitigation site shall achieve a minimum of 70 percent area of eelgrass and 30 percent density as compared to the adjusted project impact area after the first year. • The mitigation site shall achieve a minimum of 85 percent area of eelgrass and 70 percent density as compared to the adjusted project impact area after the second year. • The mitigation site shall achieve a sustained 100 percent area of eelgrass bed and at least 85 percent density as compared to the adjusted project impact area for the third, fourth, and fifth years.		

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	The amount to be transplanted shall be based upon the guidelines in the SCEMP. If remedial transplants at the project site are unsuccessful, then eelgrass mitigation shall be pursued at the secondary eelgrass transplant location. The San Diego Water Board shall verify implementation of this mitigation measure.		
Mitigation Measure 4.5.2:	In order to protect sea turtles that could potentially forage within and among eelgrass beds identified at or near the project site, the project marine biologist shall mark the positions of eelgrass beds with buoys prior to the initiation of any construction to minimize damage to turtles foraging within eelgrass beds outside the construction zone. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify that buoys have been properly placed.	Project Marine Biologist as verified by the San Diego Water Board	Prior to and throughout dredging operations and application of clean sand cover
Mitigation Measure 4.5.3:	The project marine biologist shall meet with the construction crews prior to dredging as well as periodically throughout the project to review pre-dredge survey areas of eelgrass beds to avoid those located adjacent to the project site and to review proper construction techniques. A training log shall be maintained by the project marine biologist and shall be submitted monthly to the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), who shall verify implementation of this measure.	Project Marine Biologist as verified by the San Diego Water Board	Prior to and periodically throughout dredging operations and application of clean sand cover
Mitigation Measure 4.5.4:	The contractor shall ensure that throughout the duration of dredge and clean sand cover placement activities, project-related barges and work vessels operating in areas where eelgrass beds exist shall be operated in a manner to ensure that eelgrass beds are not impacted through grounding, propeller damage, or other activities that may disturb the seafloor. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels. The project marine biologist shall periodically confirm that these measures are implemented and shall submit a monthly monitoring report to the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board).	Contractor and Project Marine Biologist, as verified by the San Diego Water Board	Ongoing throughout dredging operations and application of clean sand cover

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
Mitigation Measure 4.5.5:	The contractor shall ensure that throughout the duration of dredge and clean sand cover placement activities, barges and work vessels shall be operated in a manner to ensure that sea turtles and marine mammals are not injured or harassed through excessive vessel speed or propeller damage. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels. The project marine biologist shall periodically confirm that these measures are implemented and shall submit a monthly monitoring report to the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board).	Contractor and Project Marine Biologist, as verified by the San Diego Water Board	Ongoing throughout dredging operations and application of clean sand cover
Mitigation Measure 4.5.6:	The contractor shall ensure that construction crews and work vessel crews are briefed daily on the potential for sea turtles and marine mammals to be present and provided with identification characteristics of sea turtles, seals, sea lions, and dolphin. The project marine biologist shall periodically confirm that this measure is implemented and include verification in a monthly monitoring report.	Contractor and Project Marine Biologist, as verified by the San Diego Water Board	Ongoing throughout dredging operations and application of clean sand cover
Mitigation Measure 4.5.7:	The contractor shall ensure that all construction activity be temporarily stopped if a sea turtle or marine mammal is sighted within 100 meters of the construction zone until the sea turtle or marine mammal is safely outside the outer perimeter of project activities. The biological monitor, who will be on site periodically during dredging activities, shall have the authority to halt construction operation and shall determine when construction operations can proceed. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify implementation of this mitigation measure.	Contractor and Project Marine Biologist, as verified by the San Diego Water Board	Ongoing throughout dredging operations and application of clean sand cover
Mitigation Measure 4.5.8:	The biological monitor shall prepare an incident report of any green sea turtle or marine mammal activity in the project area and shall inform the contractor to have his/her crews be aware of the potential for additional sightings. The report shall be provided within 24 hours to the California Department of Fish and Game (CDFG) and National Marine Fisheries Service (NMFS). In the event a sea turtle, pinniped, or cetacean is injured or killed as consequence of a collision, the vessel operator and the	Project Marine Biologist, as verified by the San Diego Water Board	Upon sighting or green sea tutle or marine mammal during dredging operations and application of clean sand cover

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	appointed shipyard safety personnel shall be required to immediately notify the NMFS (Southwest Division) and shall submit a written, follow-up report within 24 hours of the incident. Any injured sea turtle or marine mammal shall be transported to an agency-approved treatment facility. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify implementation of this mitigation measure.		
Mitigation Measure 4.5.9:	A qualified biologist familiar with the California least tern and other special-status seabirds and waterfowl shall be retained and be on site to assess the roosting and foraging behavior of special-status seabirds and waterfowl at the Shipyard Sediment Site and selected staging area(s) immediately prior to and during the initial start-up phase of dredging and clean sand cover placement activities. Once it has been determined that activities are not adversely affecting seabirds and waterfowl, the biologist shall not be required to be on site continuously; however, monitoring shall be performed at least once per week (or more often if required by the resource agencies) to adequately assess whether substantial adverse impacts to special-status seabirds and waterfowl are resulting from project activities (e.g., disrupting nesting or foraging activities, harassing roosting birds). The biologist shall be present during either of the selected dredge scheduling options. In the event of an imminent threat to California least tern and/or other special-status species, the monitor shall immediately contact the contractor's construction manager. In the event the construction manager/contractor is not available, the monitor shall have the authority to redirect or halt construction activities if determined to be necessary. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) shall verify implementation of this mitigation measure.	Project Biologist, as verified by the San Diego Water Board	Prior to and ongoing throughout dredging operations and application of clean sand cover
Mitigation Measure 4.5.10:	If Staging Area 5 is selected, prior to initiation of dredging and during final design, the contractor shall endeavor to restrict dewatering and treatment activities to within the western and northern portions of the staging area to the extent feasible. To the extent practicable, activities shall be conducted in locations where existing buildings obstruct sensitive habitat areas from	Shipyards and San Diego Water Board	Prior to initation of dredging operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	noise sources. The staging area layout shall be submitted to the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) (and to the resource agencies, if required) for review and approval.		
Mitigation Measure 4.5.11:	If Staging Area 5 is selected, the California Department of Fish and Game (CDFG) shall be notified not less than 30 days in advance and shall be given the opportunity to provide recommended measures to minimize impacts from increased noise and human activity to species in the Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge (NWR). All agency-recommended measures (or agency-approved substitute measures, if recommended measures are infeasible) shall be implemented throughout the duration of project activities in Staging Area 5. The biological monitor shall inspect the site at least every 2 weeks during project activities that are conducted during the nesting season (conservatively February 1 through August 31) and shall report monthly to the State Water Resources Control Board (State Water Board).	Project Biologist , as verified by the San Diego Water Board	Not less than 30 days prior to initiation of dredging operations and on going every 2 weeks or more frequently during nesting season
4.6 Air Quality			
Mitigation Measure 4.6.1:	The contractor shall be required by contract specifications to ensure that dredging, treatment, and haul activities are timed so as not to interfere with peak-hour traffic and to minimize obstruction of through traffic lanes adjacent to the site. If necessary, a flag person shall be retained by the construction supervisor to maintain safety adjacent to existing roadways. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to the issuance of construction permits. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging, treatment and haul activity
Mitigation Measure 4.6.2:	During dredging and dewatering activities, the contractor shall support and encourage ridesharing and transit incentives for the construction crew. These specifications shall be included in the proposed project's construction documents, which shall be reviewed by the California Regional Water	Contractor, as verified by the San Diego Water Board	Ongoing during dredging, and dewatering operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	Quality Control Board, San Diego Region (San Diego Water Board) prior to the issuance of a construction permit.		
Mitigation Measure 4.6.3:	During dredging and dewatering activities, the contractor shall ensure that on-site vehicle speed shall be limited to 15 miles per hour (mph). Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to the issuance of construction permits. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging, and dewatering operations
Mitigation Measure 4.6.4:	During dredging and dewatering activities, the contractor shall ensure that all on-site roads are paved. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to the issuance of construction permits. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging, and dewatering operations
Mitigation Measure 4.6.5:	During dredging and dewatering activities, the contractor shall adhere to San Diego Air Pollution Control District (APCD) Rule 55 to ensure that all material excavated or graded is sufficiently watered to prevent airborne dust from being visible beyond the property line. Watering with complete coverage, and/or surfactants shall be applied to stockpiles of dirt, inactive construction areas, and construction roads if and as necessary. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to the issuance of construction permits. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging, and dewatering operations
Mitigation Measure 4.6.6:	During dredging and dewatering activities, the contractor shall ensure that all earthmoving activities cease during periods of high winds (i.e., greater than 25 mph averaged over 1 hour). Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San	Contractor, as verified by the San Diego Water Board	Ongoing during dredging, and dewatering operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	Diego Region (San Diego Water Board) prior to the issuance of construction permits. The San Diego Water Board shall verify implementation of this measure.		
Mitigation Measure 4.6.7:	During dredging and dewatering activities, the contractor shall ensure that all material transported off site is either sufficiently wet or securely covered to prevent excessive amounts of dust. In addition, per San Diego Air Pollution Control District (APCD) Rule 55, the construction contractor shall ensure that visible roadway dust from track-out/carry-out be minimized. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to the issuance of construction permits. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging, treatment and haul activity
Mitigation Measure 4.6.8:	The contractor shall be required by contract specifications to ensure that all diesel-powered equipment used are retrofitted with after-treatment products (e.g., engine catalysts) to the extent that they are readily available in the San Diego Air Basin (SDAB). Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to issuance of a construction permit. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dewatering and treatment operations
Mitigation Measure 4.6.9:	The contractor shall be required by contract specifications to ensure that all heavy-duty diesel-powered equipment operating and refueling at the project site use low oxides of nitrogen (NO_X) diesel fuel to the extent that it is readily available and cost effective (up to 125 percent of the cost of California Air Resources Board [ARB] diesel) in the San Diego Air Basin (SDAB). (This does not apply to diesel-powered trucks traveling to and from the project site.) Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to issuance of a construction permit.	Contractor, as verified by the San Diego Water Board	Ongoing during dewatering and treatment operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	The San Diego Water Board shall verify implementation of this measure.		
Mitigation Measure 4.6.10:	The contractor shall be required by contract specifications to ensure that alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) are utilized to the extent that the equipment is readily available and cost effective in the San Diego Air Basin (SDAB). Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to issuance of a construction permit. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dewatering and treatment operations
Mitigation Measure 4.6.11:	The contractor shall be required by contract specifications to ensure that construction equipment engines are maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to issuance of a construction permit. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dewatering and treatment operations
Mitigation Measure 4.6.12:	The contractor shall be required by contract specifications to ensure that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, is turned off when not in use for more than 5 minutes. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to issuance of a construction permit. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dewatering and treatment operations
Mitigation Measure 4.6.13:	The contractor shall be required by contract specifications to ensure that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines to the extent feasible. Contract specifications shall be included in the proposed project construction documents, which shall be	Contractor, as verified by the San Diego Water Board	Ongoing during dewatering and treatment operations

Table 7-1: Mitigation and Monitoring Reporting Program

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
	reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to issuance of a construction permit. The San Diego Water Board shall verify implementation of this measure.		
Mitigation Measure 4.6.14:	The contractor shall utilize alternative-fueled construction equipment to the maximum extent feasible. All diesel-powered construction equipment shall meet or exceed Tier III standards, or shall be equipped with ARB-verified oxidation catalysts and diesel particulate filter emission controls, using the greatest control efficiency for the specific category of equipment where feasible. The construction contractor shall demonstrate that these verified/certified technologies are available to be used at the time of project dredging and dewatering activities. These specifications shall be included in the proposed project's construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to the issuance of a construction permit. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dewatering and treatment operations
Mitigation Measure 4.6.15:	To accelerate the decomposition process and reduce odor impacts, the contractor shall apply a mixture of Simple Green and water (a ratio of 10:1) to the dredged material. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to the issuance of construction permits. The San Diego Water Board shall verify implementation of this measure.	Contractor, as verified by the San Diego Water Board	Ongoing during dredging and dewatering operations
4.7 Global Climate Change			
There are no additional mitigation measures for this topic			

[1] A turion is a specialized overwintering bud produced by aquatic herbs.

This page intentionally left blank