REMEDIATION MONITORING PLAN
SAN DIEGO SHIPYARD SEDIMENT SITE

Cleanup and Abatement Order No. R9-2012-0024

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1 INTRODUCTION

This Remediation Monitoring Plan (RMP) is one component of the Remedial Action Plan (RAP) for the San Diego Shipyard Sediment Site (Shipyard Sediment Site). This document describes provisions for water quality and sediment monitoring sufficient to demonstrate that implementation of the remedial action does not result in violations of water quality standards and that target cleanup levels are achieved by the work. Consistent with Directive B.1.l of Cleanup and Abatement Order No. R9-2012-0024 (CAO; Water Board 2012a) and Section 34.1 of the Technical Report (Water Board 2012b), this RMP includes discussion of the following key remedial monitoring elements:

- Water quality monitoring
- Sediment monitoring
- Disposal monitoring

In addition, information is provided on Biological Monitoring, which may be needed during the project. Table 1 notes all CAO requirements that this document fulfills.

Table 1
Elements Required by the CAO

Required Element	Completed	Location within RMP
Remedial Monitoring Plan (B.1.l)		
I. Water quality monitoring	✓	Section 2
II. Sediment monitoring	✓	Section 3
III. Disposal monitoring consistent with Section 34.1 of the Technical Report	✓	Section 5

The RMP is organized as follows:

- **Section 1.** Introduction
- **Section 2.** Water Quality Monitoring
- **Section 3.** Sediment Monitoring
- **Section 4.** Biological Monitoring
- **Section 5.** Disposal Monitoring
- **Section 6.** Reporting

Note that the information contained in this RMP is supplemented by the description of sampling and analysis procedural details, under separate cover in the Sampling and Analysis Plan (SAP; Appendix D). Also note that procedures for air quality monitoring are not included in this RMP, as they are not a requirement of the Mitigation Monitoring and Reporting Program (MMRP) of the Environmental Impact Report (EIR; Water Board 2012c).

1.1 Objectives of the Remediation Monitoring Plan

Monitoring during remediation activities is stipulated by the CAO to document that the following cleanup objectives are achieved:

- Water quality standards are met outside the remedial footprint (as determined by water quality monitoring).
- Dredging successfully achieves target cleanup levels within the remedial footprint (as determined by sediment monitoring).
- Sensitive biological resources, such as eelgrass, marine mammals and sea turtles, are protected (as determined by biological monitoring).
- Sediment is characterized appropriately for disposal throughout the construction process (as determined by disposal monitoring).

Monitoring activities will be the responsibility of the Project Team, consisting of representatives from the National Steel and Shipbuilding Company Shipyard Facility (NASSCO) and BAE Systems San Diego Ship Repair Facility (BAE Systems), their respective Project Coordinator, and other representatives of the Dischargers, who will be acting in coordination with San Diego Regional Water Quality Control Board (Water Board) representatives. Certain aspects of monitoring activities will also be the responsibility of the contractor; the Project Team will oversee all contractor activities to make sure that the contractor's construction and monitoring work is carried out correctly and effectively.

2 WATER QUALITY MONITORING

Water quality will be monitored during all marine construction activities, including dredging, placement of rock for the protection of marine structures and slopes, remediation of underpier areas, and placement clean cover. The objectives of the water quality monitoring program are as follows:

- Ensure that water quality conditions are within the prescribed limits of relevant regulatory requirements.
- Designate water quality monitoring procedures.
- Plan appropriate project best management practices (BMPs) to avoid and minimize project impacts to the extent practicable.
- Describe corrective actions should water quality exceedances occur.
- Document the results of water quality performance monitoring.

By collecting water quality samples at a prescribed frequency throughout the marine construction activities, short-term water quality impacts from dredging activities can be monitored to allow for corrective actions or procedure modifications to be made to bring construction activities into compliance with water quality performance criteria.

This monitoring program has been developed to ensure full compliance with the *Water Quality Control Plan for San Diego Basin* (Basin Plan; Water Board 1994) and the *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan; SWRCB 2005). In addition, this RMP has been developed to address substantive anticipated requirements of the Section 401 Water Quality Certification associated with implementation of the remedial action.

2.1 General Water Quality Protection Measures

Several BMPs can be used by the contractor to meet contract and permit requirements for minimizing resuspension, spillage, and misplacement of sediment during dredging and material placement activities. A list of possible BMPs, including operations controls and silt curtain deployment, is presented in the Quality Assurance Project Plan (QAPP; Appendix B).

2.2 Water Quality Monitoring Program

The objective of water quality monitoring is to confirm that water quality criteria are met or to describe corrective actions that may be implemented following temporary exceedances of water quality standards during any construction activity that may affect the water column. This monitoring program described here was designed to meet the objectives in the EIR (Water Board 2012c) and its associated MMRP (Section 7 of the EIR).

The water quality monitoring program, including monitoring parameters, compliance criteria, monitoring station locations and depths, field procedures, and monitoring personnel and responsibilities, is described subsequently.

2.2.1 Monitoring Parameters

The following parameters will be monitored outside of the construction area during removal action construction activities:

- Visual parameters
  - No floating particulates, suspended materials, grease, or oil
  - No significant discoloration of the water surface
- Field parameters
  - Turbidity (in nephelometric turbidity units [NTU])
  - Dissolved oxygen (DO; in milligrams per liter [mg/L])
  - Hydrogen ion concentration (pH)

2.2.2 Monitoring Locations and Depths

During each monitoring event, water quality parameters, including DO, turbidity and pH, will be measured to ensure compliance with the water quality criteria listed in Table 2. All water quality parameters measurements will be monitored on two arcs downcurrent of the construction area: one arc at 250 feet and one arc at 500 feet. In accordance with the Technical Report (Water Board 2012b), samples will be collected from a depth of 10 feet below the water surface. Monitored water quality measures will be compared to ambient background measurements outside the construction area, including San Diego Bay conditions and effects of non-remedial shipyard activities. Measurements from the 250-foot arc are intended to warn of potential problems with the point of compliance at the 500-foot arc.

Station descriptions are as follows:

- **Background (B)**, a single station located 800 feet (or more) and upcurrent from the outermost dredging and sand placement limits, at a distance and location that is far enough away from the activities to be relatively uninfluenced by them and a water depth similar to the active dredging water depth.
- **Compliance (C)**, located on a 500-foot arc downcurrent from the construction area. This arc defines the site compliance zone boundary.
- **Early Warning (E)**, located on a 250-foot arc downcurrent from the construction area. This arc is an additional "early warning" boundary.

Water quality will be monitored 10 feet below the surface at each of the stations.

2.2.3 Monitoring Frequency

Consistent with Mitigation Measure 4.2.1 of the MMRP (contained in the EIR; Water Board 2012c), turbidity and other water quality conditions (DO and pH) will be monitored by an automatic system throughout dredging operations, so as to allow real-time feedback to the dredge operator. The automatic system will include threshold alarms so that the dredge operator and other appropriate personnel recognize that one or more water quality criteria have been exceeded.

The automatic system will be supplemented by a robust system of manual water quality monitoring that will be conducted by Project Team field representatives. During dredging, samples will be collected after dredging operations have been underway for a minimum of 1 hour. A reference or upcurrent station and outside of the influence of dredging will also be sampled at similar depths and frequency for comparison to the samples collected from the dredge area.

Water quality parameters (i.e., turbidity, DO, and pH) will be measured daily for the first 2 weeks of dredging operations. In accordance with the Technical Report (Water Board 2012b), sampling will be reduced to weekly sampling if no water quality exceedances are observed. During weekly water column monitoring (after the first 2 weeks), all water quality parameters will continue to be measured. In accordance with the Technical Report (Water Board 2012b), if a significant change in operations occurs (i.e., exceedance of

criterion listed in Table 2), the monitoring frequency will increase to daily monitoring until results show that there are no water quality exceedances for 3 consecutive days; monitoring will again be reduced to weekly.

2.2.4 Compliance Criteria

Consistent with the requirements of Mitigation Measure 4.2.1 of the EIR (Water Board 2012c), water quality criteria that will be applied to this project are based on the Basin Plan (Water Board 1994). Specific criteria are discussed subsequently and specified in Table 2. The point of compliance with these criteria will be located 500 feet from the edge of the construction area. The construction area is defined as the area(s) occupied by the dredging barge(s), the sediment scow(s), sand and rock placement equipment, demolition work, and other work, as delineated by the outermost silt curtain.

Table 2
Water Quality Compliance Criteria

Parameter	Compliance Boundary Standard
Visual	• No significant floating particulates, suspended materials, grease, or oil shall be visible • No aesthetically undesirable discoloration of the water surface
Turbidity	• No more than 20 percent above background turbidity levels when background is less than 50 NTU • No more than 10 NTU above background when background is between 50 and 100 NTU • No more than 10 percent above background turbidity levels when background is greater than 100 NTU
DO	• Not depressed more than 10 percent below the background DO levels
pH	• No more than 0.2 above or below background levels • Within limits of 6.0 and 9.0 at all times

Notes:
Table taken from Basin Plan (Water Board 1994).

2.2.4.1 Visual

There shall be no visible floating particulates, suspended materials, grease, or oil sheens determined to be emanating from the construction area. There shall be no distressed or dying fish as a result of the site construction activities.

2.2.4.2 Turbidity

At the point of compliance (i.e., 500 feet from the edge of the construction area), turbidity shall not have a 20 percent increase over background levels when background turbidity is less than 50 NTU. When background turbidity is between 50 and 100 NTU, turbidity shall not exceed 10 NTU over background at the compliance boundary. If background turbidity is greater than 100 NTU, turbidity at the point of compliance shall not have a 10 percent increase over background levels.

2.2.4.3 Dissolved Oxygen

At the point of compliance, DO shall not have a 10 percent decrease from background DO levels.

2.2.4.4 Hydrogen Ion Concentration

At the point of compliance, pH shall not be 0.2 above or below background levels. pH shall not be lower than 6 and shall not be higher than 9 at any time.

2.2.5 Field Procedures

2.2.5.1 Methods and Equipment

Water quality parameters (turbidity, DO, and pH) will be measured using a multi-parameter instrument capable of in situ monitoring and profiling with internal data logging capabilities. The instrument must be capable of in situ sampling of depth, pH, DO, temperature, and turbidity. The YSI Model 6820 V2 Sonde, or comparable instrument, outfitted with appropriate sensors to meet sampling needs is suggested for this effort.

2.2.5.2 Sample Location and Depth Control

A laser range finder and/or differential global positioning system (DGPS) will be used to locate and establish station locations. Location control data will be documented on a water quality monitoring form.

2.2.5.3 Station Identification

All stations will be properly identified on the water quality monitoring form and consistently applied from one monitoring event to the next. Station names will use the following identification scheme consisting of four alphanumeric characters:

A-B-C-

Where:

A The first character defines the monitoring station number.

B The second character will be used to identify the construction activity being monitored:

- D = dredging
- P = material placement

C The next character will be used to identify the water quality monitoring location:

- B = background station
- E = early warning station
- C = compliance station

2.2.5.4 Field Documentation

Water quality measurement data that is automatically recorded will include date, time, turbidity, pH, and DO measurements.

Documentation of visual water quality monitoring will include the following:

- Location of observations
- Date and time
- Relevant description of observation(s)

- Tidal phase (flood, ebb, or slack)
- Predominant direction of current
- Weather and wind conditions

Any instances of apparent water quality exceedances or alarms will be brought to the attention of the Project Coordinator.

2.2.5.5 Water Quality Field Equipment Calibration and Maintenance

Monitoring equipment will undergo routine and ongoing calibration according to the manufacturers' instructions prior to use in the field. Instruments and equipment will be tested and inspected before each monitoring event. Any field equipment that is faulty or not functioning properly will not be used for monitoring.

2.2.6 Potential Response Actions: Water Quality Monitoring

This section describes the contingency actions that will occur if the monitoring crew reports an exceedance of a visual or conventional water quality parameter. In the event of an exceedance, the contractor shall immediately notify the Project Team and begin to implement additional or enhanced operational or engineering BMPs. The QAPP (Appendix B) provides a standard list of construction BMPs to protect water quality. Additional operational modifications are provided in the following subsections.

2.2.6.1 Responses to Visual Monitoring

If visual monitoring indicates potential exceedance of water quality criteria during the removal action (i.e., visible turbidity attributed to site construction activities), preventative or corrective actions will be implemented and followed.

2.2.6.2 Exceedance of Water Quality Measures

If conventional parameters (turbidity, DO, or pH) are exceeded at the compliance boundary during removal action construction activities, the following contingency actions will be implemented:

- Evaluate the concurrent measurements at Background and Compliance monitoring stations and supporting visual evidence to determine whether the exceedance is

caused by site construction activities versus other ambient conditions in San Diego Bay (e.g., wind waves, boat wakes, barge/ship traffic, and storm inflow).

- If the exceedance is confirmed, immediately notify the contractor and the Project Team. The contractor will be directed to immediately modify operations or implement additional BMPs to mitigate the exceedance (see QAPP for list of construction BMPs to protect water quality and this section for a list of additional modifications to operations).
- Reevaluate field measurements at all relevant stations 30 minutes later, after additional BMPs or operational modifications are implemented.
- The contractor shall take actions to mitigate the exceedance. If the water quality exceedance continues to persist, even with additional BMPs or operational modifications, a path forward will be discussed with the Project Team. The path forward could include some or all of the following:
  - Implement more aggressive BMPs or operational modifications.
  - If additional measures are not successful at controlling the water quality exceedance, it may be necessary to stop work to further assess the source of the exceedance, identify effective mitigation measures, and allow the water column to recover.

2.2.6.3 Operational Modifications

In addition to the standard BMPs listed in the QAPP, the following operational modifications can be implemented individually or in combination as part of the response to a confirmed water quality exceedance:

- Adjust the sequence and/or speed of dredging and disposal operations.
- Reposition dredge operations in such a way as to ensure future exceedances do not occur.
- Fix, maintain, and/or upgrade floating silt curtains.
- Modify, either on a temporary or permanent basis, dredge equipment (such as the dredging bucket size or type).

2.2.6.4 Discharge of Oil, Fuel, or Chemicals

In the event of a discharge of oil, fuel, or chemicals into San Diego Bay, the source of the spill or leak shall be identified and controlled, and cleanup efforts shall begin immediately. The contractor shall immediately notify the Shipyard Sediment Site emergency response personnel, who will make all appropriate regulatory notifications in accordance with site emergency notification procedures. Cleanup shall include appropriate disposal of any spilled material and cleanup material.

2.2.7 Water Quality Monitoring Personnel and Responsibilities

Key monitoring personnel required to implement the water quality monitoring program include the following:

- Water Quality Field Leader
- Monitoring personnel

Persons fulfilling these roles will be designated at least 1 week prior to the start of monitoring activities, and contact information will be provided at that time to the Water Board and the Project Team. All monitoring personnel will be experienced in the collection and measurement of water quality parameters.

2.2.7.1 Project Team Responsibilities

The Project Team will be responsible for the following:

- Reviewing field reports to verify that appropriate field methods and quality control procedures are being implemented in accordance with the procedures specified in this RMP
- Coordinating with the contractor to ensure appropriate construction BMPs are being implemented and to strategize ways to add BMPs or enhance the effectiveness of existing BMPs, as necessary, to mitigate unacceptable water quality effects
- Submission of records to regulatory agencies as required by permits

3 SEDIMENT MONITORING

Prior to initiation of a sediment monitoring program, a post-remedial bathymetric survey will be performed to verify that the contractor has reached the target dredging depths and extents to accomplish full removal of chemically impacted sediment.

3.1 Confirmation Sampling Objectives

The objective of sediment monitoring is to determine if cleanup activities have met the cleanup objectives prior to the demobilization of the construction operation.

3.2 Sediment Monitoring Approach

The sediment monitoring program was designed to follow the requirements specified in the Technical Report (Water Board 2012b), which include the following:

- Confirmation sediment sampling will consist of core sediment sample collection in each remedial footprint polygon.
- Sediment core samples analyzed for chemical constituents will be those horizons that represent the first undisturbed depth beneath the dredge depth.
- Core horizons representing the first undisturbed depth beneath the dredge depth will be determined based on the accuracy that the dredge operator can guarantee the depth that they dredge.

Based on the above requirements, sediment core samples will be collected within the remedial footprint polygons. The target number of samples and any compositing schemes for each polygon will be finalized after the development of a final dredge design for the project.

The target core length has been estimated to be as long as 60 centimeters (cm), which represents the accuracy that some dredge operators can guarantee the depth that they dredge, as specified in the Technical Report. However, final target core length will be determined after the dredge contractor and their dredging accuracy has been determined.

For purposes of determining whether the targeted contamination has been removed, sediment below the residual (top 5 cm) horizon will be analyzed for the contaminants of concern (COCs); specifically, the Technical Report indicates that the first undisturbed depth

beneath the dredge depth starts at a minimum of 5 cm (see Section 34.1.2, page 34-3, first bullet; Water Board 2012b) below the sediment surface. The top 5 cm is likely suggested, because this layer may represent the thin surface layer of unconsolidated or residual sediment that is anticipated to remain in place after dredging has been completed. The subsurface samples are important because they will indicate the contaminant level in the undredged materials and, therefore, will be more representative of actual post-dredging bottom conditions. Modifications to horizons to be analyzed for COCs may be proposed, however, if the residual layer is found to vary from the 5-cm layer discussed previously.

3.3 Methods, Locations, and Timing

A brief summary of the monitoring methods, locations, and timing is provided in the following subsections, and more detailed procedures for sediment core sampling are provided in the SAP (Appendix D) for this work. Laboratory analysis methods are also listed in SAP. Detailed field and laboratory quality assurance and quality control criteria, including method specifications, detection limits, accuracy, and precision requirements, are provided in the Post-Remedial Monitoring Plan (Exponent 2012) and apply to both the remedial monitoring and post-remedial monitoring.

3.3.1 Sediment Sampling Methods

The confirmation subsurface sediment samples will be collected using a vibracore coring device or similar deployed from a winch line on a sampling vessel. Cores will be advanced up to 60 cm or until refusal.

3.3.2 Sediment Sample Locations

Subsurface sediment sample locations will be systematically distributed to confirm performance objectives have been achieved in each cleanup area. The horizontal extents of the final cleanup areas will be determined during final design, as described in the RAP and Design Criteria Report (Appendix A). Once cleanup areas have been established, confirmation sediment sample locations will be designated.

3.3.3 Chemical Analytical Parameters

The subsurface depth horizon (approximately 5 to 60 cm) samples will be analyzed for and compared to the post-remedial dredge area concentrations provided in Table 3. Aliquots from the 0- to 5-cm interval, or residual layer, will be archived. Consistent with the post-remedial program requirements and best dredge practices, these samples may be used to determine the need for a clean sand cover.

3.3.4 Monitoring Timing

All confirmational sediment sampling is estimated to occur within 24 to 48 hours after dredging has been completed within each cleanup area. This timeframe is needed to allow dredge residuals (sediment suspended during dredging) sufficient time to settle and, should additional remedial activities be required, ensure that the test results are received prior to the contractor demobilizing from the Shipyard Sediment Site.

3.4 Performance Standards for Dredging

The contractor will be required to remove sediments to depths and extents shown on the construction plans, which will be verified through bathymetric surveys, as indicated in the QAPP (Appendix B). Once it has been adequately demonstrated that the required dredging depths have been achieved, the effectiveness of sediment removal will be determined by evaluating the sediment quality of the post-dredge subsurface, as described previously. The Project Team will conduct post-remedial confirmatory sampling to determine if cleanup levels are achieved or if further cleanup activities are required, as described in Section 5.3. If concentrations of primary COCs in subsurface sediments (deeper than 5 cm or the residual layer) are above 120 percent of post-remedial dredge area concentrations (Table 3) after completion of initial dredging, the potential response actions described in Section 5.2 and 5.3 will be evaluated.

Table 3
Post-Remedial Dredge Area Concentrations

Chemical	Units (dry weight)	Post-Remedial Dredge Area Concentrations	120 Percent of Post-Remedial Dredge Area Concentrations
Copper	mg/kg	121	145
Mercury	mg/kg	0.57	0.68
Tributyltin	µg/kg	22	26
HPAH[1]	µg/kg	663	796
Total PCB Congeners[2]	µg/kg	84	101

Notes:
Table taken from CAO (Water Board 2012a).
µg/kg = microgram per kilogram
mg/kg = milligram per kilogram
1 HPAHs = sum of six PAHs: Fluoranthene, Perylene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene, and Dibenzo(a,h)anthracene.
2 Total PCBs = sum of 41 congeners: 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

3.5 Potential Response Actions: Sediment Monitoring

A decision matrix for interpreting the results of the confirmation subsurface sediment monitoring is provided in Table 4. Final response actions will be dependent on finalization of the dredge design. The threshold for additional action (including additional sampling, additional dredging, and clean sand placement) is an average subsurface (approximately 5 to 60 cm) chemical concentration greater than 120 percent of the post-remedial dredge area concentration (Table 3).

If the average concentration is less than 120 percent of the post-remedial dredge area concentration, cleanup is complete and no further action is required, though a sand cover may be applied to provide restorative layer for biological growth. If average concentrations are greater than the threshold, further testing and/or remedial actions will be required, as discussed subsequently.

3.5.1 Sediment Monitoring Exceedance

If subsurface concentrations within areas are confirmed to be greater than post-remedial dredge area concentrations, the following additional remedial actions will be evaluated:

- Additional dredging of localized hotspot
- Clean sand placement

Table 4

Confirmational Sample Remedial Action Decision Matrix

Sediment Chemistry	Sediment Condition	Remedial Action
Subsurface (approximately 5 to up to 60 cm) is less than 120 percent of the post-remedial dredge area concentration (Table 3)	**Cleanup Complete** The area weighted average concentration is below the cleanup levels.	• No further remedial action; dredging activities are complete in this area. • Sand cover may be applied as a biologically restorative layer.
Subsurface (approximately 5 to up to 60 cm) exceeds 120 percent post-remedial dredge area concentration (Table 3)	**Subsurface Contamination** Further testing and/or remedial actions may be required.	• If subsurface concentrations within the area are confirmed to be greater than post-remedial dredge area concentrations, then remedial actions may include the following: – Additional dredging – Placement of clean sand (if additional dredging is determined to be inefficient or infeasible)

4 BIOLOGICAL MONITORING

As required by the MMRP (Water Board 2012c) mitigation measures, the following biological monitoring measures will be implemented:

- A pre- and post-remedial eelgrass survey will be performed per Southern California Eelgrass Mitigation Policy; if impacts are noted, mitigation measures will be implemented in accordance with resource agency requirements.
- Eelgrass beds will be identified and marked prior to construction by a biologist to protect sea turtles.
- Measures (e.g., speed restrictions and off-limit areas) will be implemented on construction equipment and operations to ensure eelgrass beds are not impacted as a result of the construction activities.
- Construction activities will be temporarily stopped if a sea turtle or marine mammal is sighted within 100 meters of the construction area.

In addition, the project specifications are expected to limit construction activities, such that they are performed only during the open environmental windows for least tern. Therefore, Endangered Species Act (ESA) monitoring is not anticipated to be required. If construction activities extend into the least tern window, the appropriate ESA monitoring requirements per the EIR (Water Board 2012c) will be implemented.

5 DISPOSAL MONITORING

Prior to sediments leaving the offloading site, the contractor will be required to demonstrate all sediments have passed the paint filter test to ensure that sediments have been sufficiently dewatered and do not contain free liquids. At the contractor's discretion, and as approved by the construction management team, an additive may be mixed in with the sediment to bind available water and decrease the dewatering time.

The contractor will also be required to perform additional analytical testing of stockpiled sediment as dictated landfill acceptance criteria, to demonstrate and document the material's suitability for disposal at selected landfills. Specific requirements for waste characterization at the disposal site will be developed after one or more disposal facilities have been identified. Specific testing requirements will be based on the Waste Discharge Requirements of the disposal facilities because each disposal facility has specific testing requirements that are often volume- and analyte-specific.

For example, local landfills (such as the Otay Landfill in Chula Vista) require test results from 75 samples to fully represent the planned volume of sediment for disposal (143,400 cubic yards), with each sample obtained by vibracoring to the projected dredge depth. Required testing to determine dredged material disposal suitability for the Otay Landfill includes paint filter, percent moisture, Title 22 metals, volatiles, semi-volatiles, pesticides/herbicides, polychlorinated biphenyls (PCBs), and total petroleum hydrocarbon extended range (C_4 – C_{40}). Analytical methods for these analyses are listed in the SAP (Appendix D) for this work.

Because open-ocean disposal is not planned, no biological or bioassay testing is anticipated.

6 REPORTING

6.1 Weekly Reports

As required by the MMRP (Water Board 2012c), the Project Team will prepare and submit weekly water quality monitoring reports, which provide results from each week's water quality monitoring activities and will compile the results into a summary table with a comparison to water quality compliance criteria.

6.2 Quarterly Reports

As required by the CAO, the Project Team will prepare and submit quarterly progress reports, which describe all actions taken toward achieving compliance with the CAO, as well as results of any sampling, testing, analyses, data collection, or other evaluations. Quarterly reports will be submitted by or before the 15th of March, June, September, and December of each year following the CAO's effective date. Each quarterly report will summarize current schedule and any delays or modifications to that schedule.

7 REFERENCES

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