

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. xxxx
FOR
PORT OF LONG BEACH
(MIDDLE HARBOR REDEVELOPMENT PROJECT)
(FILE NO. 09-204)**

1. Receiving Water Monitoring

The following sampling protocol shall be undertaken by the Port of Long Beach (POLB) during the proposed project. Sampling for the receiving water monitoring shall commence at least one week prior to the start of the dredging and fill operations and continue at least one week following the completion of all such operations. Sampling shall be conducted a minimum of once per week during dredging operations (twice per week during the first two weeks of dredging operations). Sampling shall be conducted down-current of the dredge sites at least one hour after the start of dredging operations. All receiving water monitoring data shall be obtained via grab samples or remote electronic detection equipment. Receiving water samples shall be taken at the following stations:

| <u>Station</u> | <u>Description</u> |
|----------------|--|
| A | Station A is located approximately 1000 feet up-current (on a flooding tide) of the construction project boundary (figure 1). This station defines the near-dredging background for informational purposes. |
| B | Station B is located approximately 200 feet beyond the construction project boundary (figure 1). This station represents an early-warning screening station to determine if Best Management Practices may need to be implemented. |
| C | Station C is located approximately 300 feet from the construction project boundary (figure 1). This station defines the dredging mixing zone boundary, beyond which temporary water quality impacts related to dredging activities are not to occur. |
| D | Station D is located approximately 1,500 feet from the construction project boundary. This station defines the harbor background and provides a baseline for comparison to determine if temporary water quality impacts are present at station C. |

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August 13, 2014

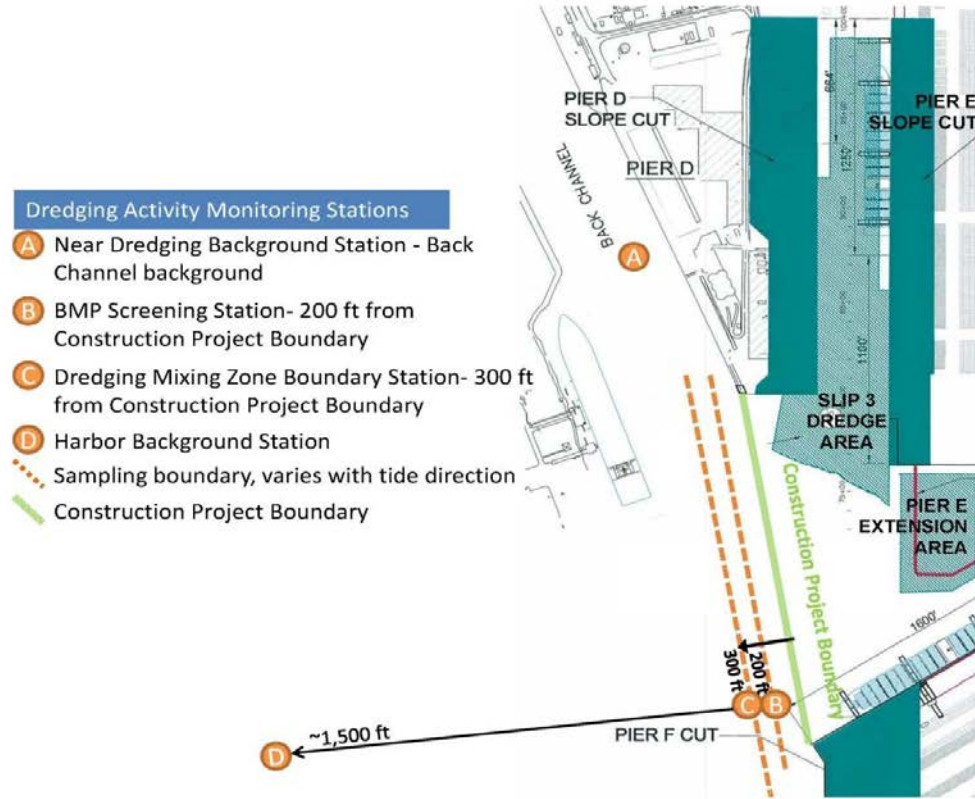


Figure 1. Location of water quality monitoring stations.

The following shall constitute the receiving water monitoring program:

| <u>Parameters</u> | <u>Units</u> | <u>Station</u> | <u>Frequency</u> |
|----------------------------------|-----------------|----------------|---------------------|
| Dissolved oxygen ¹ | mg/l | A - D | Weekly ² |
| Light transmittance ¹ | % Transmittance | " " | " |
| pH ¹ | pH units | " " | " |
| Suspended solids ³ | mg/l | " " | " |

¹Measurements shall be taken near the surface (1 meter below the water surface), near the bottom (1 meter above the sediment surface) and mid-water throughout the water column (at a minimum at 2-meter increments).

²During the first two weeks of dredging, stations shall be sampled two times per week.

³Mid-depth shall be sampled.

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Water column light transmittance values from Stations C and D shall be compared for the near surface (1 meter below the surface), for mid-water (averaged values throughout the water column, excluding the near surface and bottom) and for the bottom (1 meter above the bottom). When the difference in % light transmittance between stations C and D (for the near surface or mid-water or bottom) is 30% or greater, POLB shall notify the contractor and implement additional BMPs. Station C shall be resampled after BMPs have been in place for at least two hours. If after resampling, light transmittance values still exceed the 30% trigger, then water samples shall be collected on the first date of exceedance at mid-depth (or the depth at which the maximum turbidity occurs) and analyzed for trace metals, DDTs, PCBs and PAHs (these chemical analyses do not need to be performed on the second or third day following an exceedance, but will be required whenever a subsequent exceedance event occurs). At a minimum, one set of water samples shall be collected and analyzed for these chemical constituents during the first month of the dredging operation, even if no exceedances of the light transmittance criteria occur.

In the event that the water column light transmittance values from Stations C and D, exceed the 30% trigger described above, POLB shall conduct light transmittance monitoring described above daily until two consecutive days with no exceedances have been demonstrated. POLB shall notify the Regional Board, the California Coastal Commission, the United States Environmental Protection Agency and the United States Army Corps of Engineers within 24 hours following observance of a transmissivity exceedance. PLOB shall investigate whether the exceedance is due to obvious dredging operational problems and can be corrected easily and quickly. However, if the turbidity problem persists or recurs, the POLB shall look for other causes of the problem and evaluate whether additional, more aggressive best management practices are required to eliminate the exceedances; this evaluation shall be performed in consultation with the four regulatory agencies listed above.

In the event that light transmittance at Station B is less than that measured at Stations A and D, indicating that elevated suspended particulates in the area may be due to dredging activities, the dredge contractor will be notified immediately and Best Management Practices to improve water quality will be implemented. Sampling at Station C will resume within 2 hours of the BMP implementation.

Color photographs shall be taken at the time of sampling to record the presence and extent of visible effects of dredging operations. These photographs shall be submitted with the receiving water monitoring reports.

POLB shall provide Regional Board staff with a receiving water monitoring program field schedule at least one week prior to initiating the program. Regional Board staff shall be notified of any changes in the field schedule at least 48 hours in advance.

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2. Observations

The following receiving water observations shall be made and logged daily during dredging or excavating operations:

- a. Date and time;
- b. Direction and estimated speed of currents;
- c. General weather conditions and wind velocity;
- d. Tide stage;
- e. Appearance of trash, floatable material, grease, oil or oily slick, or other objectionable materials;
- f. Discoloration and/or turbidity;
- g. Odors;
- h. Depth of dredge operations during previous day;
- i. Amount of material dredged the previous day;
- j. Cumulative total amount of material dredged to date.

3. General Provisions

All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" promulgated by the United States Environmental Protection Agency.

All chemical analyses shall be conducted at a laboratory certified for such analysis by the State Department of Health Services, Environmental Laboratory Accreditation Program (ELAP), or approved by the Executive Officer.

POLB shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to insure accuracy of measurements, or shall insure that both activities will be conducted by third parties under POLB supervision.

A grab sample is defined as an individual sample collected in fewer than 15 minutes.

All samples shall be representative of the waste discharge under normal operating conditions.

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4. Reporting

Monitoring reports shall be submitted within 10 days following each weekly sampling period. In reporting, the Port shall arrange the monitoring data in tabular form so that dates, time, parameters, test data, and observations are readily discernible. The data shall be summarized to demonstrate compliance with the waste discharge requirements. A final report, summarizing the results of the weekly monitoring and reporting the total volume discharged, shall be submitted within one month of completion of the project.

Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

Each monitoring report must affirm in writing that:

All analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current EPA guidelines or as specified in the Monitoring Program.

For any analysis performed for which no procedure is specified in the EPA guidelines or in the Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.

5. General Provisions for Reporting

For every item where the requirements are not met, POLB shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

Each report shall contain the following completed declaration:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

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Monitoring and Reporting Program No. xxxx
Port of Long Beach
Middle Harbor Redevelopment Project

Order No. R4-2014-xxxx

Executed on the _____ day of _____, 20____,
at _____.

_____(Signature)

_____(Title)"

These records and reports are public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by:

SAMUEL UNGER, P.E.
Executive Officer

Date: October 9, 2014

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