

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

ORDER NO. R4-2003-0096

**WASTE DISCHARGE REQUIREMENTS
FOR
PORT OF LOS ANGELES
(BERTHS 226-231 MAINTENANCE DREDGING)
(FILE NO. 03-067)**

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

1. The Port of Los Angeles (hereinafter the "Port") has filed an application for Waste Discharge Requirements for maintenance dredging activities within Los Angeles Harbor.
2. The Port proposes to conduct maintenance dredging activities at Berths 226-231 (Evergreen Terminal) within the North Main Channel of Los Angeles Harbor to restore the design depth at these berths to allow safe berthing of deep draft vessels (Figure 1). The Port proposes to dredge approximately 25,000 cubic yards of sediment to deepen the berths from the existing depth of approximately -43 feet Mean Lower Low Water to approximately -45 feet Mean Lower Low Water (plus a two-foot overdredge allowance). These berths previously were dredged in 1993.
3. The Port conducted a sediment characterization study to evaluate contaminant concentrations in the bottom sediments in the vicinity of Berths 226 to 231. Sediment samples were collected with a vibrocore at fifteen locations along the face of Berths 226-231. Core samples were taken to a depth of -48 feet Mean Lower Low Water and each of the fifteen samples was analyzed for trace metal and trace organic concentrations, as well as grain size characteristics.

The sediments were fairly coarse-grained, ranging from 39% to 96% sand. Metals concentrations (arsenic, copper, lead, mercury, nickel) and trace organic concentrations (DDTs, PCBs and PAHs) at several of the sampling stations exceed the levels at which toxic effects to aquatic organisms may occur (Effects Range Low Guidelines developed by National Oceanographic and Atmospheric Administration). DDT concentrations at several stations also exceed the levels at which toxic effects to aquatic organisms are likely to occur (Effects Range Median Guidelines).

June 4, 2003

Table 1. Sediment Characteristics – Berths 226 -231

| Parameter | Concentration (Range of values from 15 core samples) | Effects Range Low (ERL) Guideline | Effects Range High (ERM) Guidelines | Number of Samples Exceeding Guidelines |
|-----------|---|---|---|---|
| Sand | 39.1–96.3 % | Not applicable | | |
| Silt | 1.9–38.4 % | Not applicable | | |
| Clay | 1.8–27.5 % | Not applicable | | |
| Silver | 0.062–0.35 ppm | 1 ppm | 3.7 ppm | 0 % > ERL 0% > ERM |
| Arsenic | 2.1-8.4 ppm | 8.2 ppm | 70 ppm | 7 % > ERL 0 % > ERM |
| Cadmium | 0.12-0.78 ppm | 1.2 ppm | 9.6 ppm | 0 % > ERL 0% > ERM |
| Chromium | 13-61 ppm | 81 ppm | 370 ppm | 0 % > ERL 0% > ERM |
| Copper | 10-87 ppm | 34 ppm | 270 ppm | 60 % > ERL 0 % > ERM |
| Mercury | 0.033-0.39 ppm | 0.15 ppm | 0.71 ppm | 67 % > ERL 0 % > ERM |
| Nickel | 5.1-28 ppm | 21 ppm | 51.6 ppm | 20 % > ERL 0 % > ERM |
| Lead | 5.3-55 ppm | 47 ppm | 218 ppm | 7 % > ERL 0 % > ERM |
| Selenium | 0.22-1.0 ppm | Not applicable | Not applicable | |
| Zinc | 24-190 ppm | 150 ppm | 410 ppm | 20 % > ERL 0 % > ERM |
| Total DDT | 1.9-74 ppb | 1.58 ppb | 46.1 ppb | 100 % > ERL 30 % > ERM |
| Total PCB | <10-81 ppb | 22.7 ppb | 180 ppb | 73 % > ERL 0 % > ERM |
| Total PAH | 362-5705 ppb | 4022 ppb | 44792 ppb | 7 % > ERL 0 % > ERM |

ppm = parts per million; ppb = parts per billion; DDT = dichloro-diphenyl-trichloroethane; PCB = polychlorinated biphenyls; PAH = polynuclear aromatic hydrocarbons

4. The Port proposes to dispose of all of the dredged material at the Southwest Slip's Confined Disposal Facility within the West Basin of Los Angeles Harbor (Figure 1). This constructed fill site would be created as part of the Port's Channel Deepening Project and will be designed to accept dredged material such that contaminants would be sequestered to prevent releases to the environment.

Although the Southwest Slip Confined Disposal Facility is the preferred disposal site, scheduling constraints might require the Port to dispose of the dredged material at another constructed fill site, such as the Pier 300 40-Acre Expansion site to be created within Los Angeles Harbor (Figure 1).

5. The Regional Board adopted a revised Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties on June 13, 1994. The Water Quality Control Plan contains water quality objectives for Long Beach Harbor. The requirements contained in this Order as they are met will be in conformance with the goals of the Water Quality Control Plan.
6. The beneficial uses of the inner harbor waters are: industrial service supply, navigation, water contact recreation (potential use), non-contact water recreation, commercial and sport fishing, marine habitat, preservation of rare and endangered species, and shellfish harvesting (potential use). The beneficial uses of the outer harbor waters are: navigation, water contact recreation, non-contact water recreation, commercial and sport fishing, marine habitat, preservation of rare and endangered species, and shellfish harvesting (potential use).
7. The City of Los Angeles filed a Notice of Exemption (citing Article III, section 2(i) of the City CEQA Guidelines) for the Berths 226-231 Maintenance Dredging Project on June 1, 2003, pursuant to Public Resources Code section 21000 et seq. The United States Army Corps of Engineers issued Permit No. 90-00457-CSC in 1996 for maintenance dredging operations within the Port.
8. With proper management of the dredging and disposal operations, the project is not expected to release significant levels of contaminants to the Harbor waters or other State waters nor adversely impact beneficial uses.
9. Dredging and disposal operations will be accomplished through the use of temporary equipment. The Waste Discharge Requirements imposed below will not result in any significant increase in energy consumption.

The Regional Board has notified the Port and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED that the Port of Los Angeles, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act as amended, and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Requirements

1. The removal and placement of dredged/excavated material shall be managed such that the concentrations of toxic pollutants in the water column, sediments or biota shall not adversely affect beneficial uses, in particular those identified in Finding number 6 above.
2. Enclosed bay and estuarine communities and populations, including vertebrate, invertebrate and plant species, shall not be degraded as a result of the discharge of waste.
3. The natural taste and odor of fish, shellfish or other enclosed bay and estuarine resources used for human consumption shall not be impaired as a result of the discharge of waste.
4. Toxic pollutants shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
5. There shall be no acute toxicity or chronic toxicity in ambient waters as a result of the discharge of waste.
6. The Port shall conduct the monitoring required and comply with the reporting requirements outlined in the attached Monitoring and Reporting Program, which is incorporated by reference as part of these Waste Discharge Requirements.
7. Dredging, excavation or disposal of dredge spoils shall not cause any of the following conditions in the receiving waters:
 - a. The formation of sludge banks or deposits of waste origin that would

adversely affect the composition of the bottom fauna and flora, interfere with the fish propagation or deleteriously affect their habitat, or adversely change the physical or chemical nature of the bottom.

- b. Turbidity that would cause substantial visible contrast with the natural appearance of the water outside the immediate area of operation.
- c. Discoloration outside the immediate area of operation.
- d. Visible material, including oil and grease, either floating on or suspended in the water or deposited on beaches, shores, or channel structures outside the immediate area of operation.
- e. Objectionable odors emanating from the water surface.
- f. Depression of dissolved oxygen concentrations below 5.0 mg/l at any time outside the immediate area of operation.
- g. Any condition of pollution or nuisance.

B. Provisions

- 1. The Discharge Requirements specified above are valid only for dredging and disposal of a maximum volume of 25,000 cubic yards of sediment, as proposed by the Port.
- 2. The Port shall notify the Regional Board immediately by telephone of any adverse conditions in receiving waters or adjacent areas resulting from the removal of dredge materials; written confirmation by the Port to the Regional Board shall follow within one week.
- 3. A copy of this Order shall be made available at all times to project construction personnel.
- 4. The Port shall provide the following information to the Regional Board:
 - a. A copy of the final permit issued by the Department of the Army for the dredge and disposal operations.
 - b. The scheduled date of commencement of each dredging operation and an engineering plan and profile of the

- excavation and the disposal site at least two weeks prior to commencement.
- c. Notice of termination of the operation, within one week following the termination date.
5. The Port shall submit, under penalty of perjury, technical reports to the Regional Board in accordance with specifications prepared by the Executive Officer.
 6. In accordance with section 13260(c) of the Water Code, the Port shall file a report of any material change or proposed change in the character, location, or volume of the waste.
 7. These requirements do not exempt the Port from compliance with any other laws, regulations, or ordinances which may be applicable: they do not legalize this waste discharge, and they leave unaffected any further restraint on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
 8. In accordance with Water Code section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification. All discharges of waste into waters of the State are privileges, not rights.
 9. This Order includes Attachment N: "Standard Provisions, General Monitoring and Reporting Requirements" ("Standard Provisions") and the attached Monitoring and Reporting Requirements, both of which are incorporated herein by reference. If there is any conflict between provisions stated hereinbefore and said "Standard Provisions", those provisions stated hereinbefore prevail. If there is any conflict between requirements stated in the attached Monitoring and Reporting Program and said "Standard Provisions", the former shall prevail.
 10. This Order fulfills the requirements for a Clean Water Act Section 401 Water Quality Certification for the proposed project. Pursuant to section 3860 of title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:
 - a. this certification action is subject to modification or revocation upon

administrative or judicial review, including review and amendment pursuant to section 13330 of the California Water Code and Article 6 (commencing with 23 CCR section 3867);

- b. this certification action is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought;
- c. this certification is conditioned upon total payment of any fee required pursuant to 23 CCR division 3, chapter 28, and owed by the applicant.

11. This Order shall expire on December 31, 2004

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on July 10, 2003.

DENNIS A. DICKERSON
Executive Officer

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

**MONITORING AND REPORTING PROGRAM NO. 8615
FOR
PORT OF LOS ANGELES
(BERTHS 226-231 MAINTENANCE DREDGING)
(FILE NO. 03-067)**

1. Receiving Water Monitoring

The following sampling protocol shall be undertaken by the Port of Los Angeles (Port) during the dredging and/or fill projects. 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 a week during 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 | 30.5 meters (100 feet) up current of the dredging operations, safety permitting. |
| B | 30.5 meters (100 feet) down current of the dredging operations, safety permitting. |
| C | 91.5 meters (300 feet) down current of the dredging operations. |
| D | Control site (area not affected by dredging operations). |

The following shall constitute the receiving water monitoring program:

Water Column Monitoring

| <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 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.

Water column light transmittance values from Stations C and D shall be averaged for the near surface (1 meter below the surface), mid-water and bottom (1 meter above the bottom). If the difference in % light transmittance is 30% or greater (based on a comparison of the averaged values at the two stations), water samples shall be collected at mid-depth (or the depth at which the maximum turbidity occurs) and analyzed for trace metals, DDTs, PCBs and PAHs. At a minimum, one set of water samples shall be collected and analyzed for these chemical constituents during the maintenance dredging operation.

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.

The Port 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.

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.

The Port 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 Port 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.

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, the Port 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.

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:

DENNIS A. DICKERSON
Executive Officer

Date: July 10, 2003