

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

**ORDER NO. R4-2004-0092**

**WASTE DISCHARGE REQUIREMENTS  
FOR  
CITY OF REDONDO BEACH  
(KING HARBOR MAINTENANCE DREDGING)  
(FILE NO. 03-068)**

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

1. The City of Redondo Beach (hereinafter the "City") has filed an application for Waste Discharge Requirements for maintenance dredging activities located within King Harbor (Figure 1).
2. The City proposes to conduct maintenance dredging activities to remove shoaling from three areas located within King Harbor. Dredge Areas I and III will be dredged with a small hydraulic dredge to restore depths to -18 feet Mean Lower Low Water (Figures 2 and 3). The dredged sandy material from these areas (approximately 56,500 cubic yards) will be pumped through a combination of plastic and metal pipe to a beach/surf zone deposition area located approximately 1000 feet south of the Redondo Beach Pier complex, where the material would be deposited below the mean high tide line and would help replenish the sandy beach.

Dredge Areas IIA and IIB will be dredged to restore depths to -10 feet Mean Lower Low Water (Figure 3). These areas cannot be accessed readily by conventional dredging equipment. In the event that a small hydraulic dredge cannot be employed, the shoals in these areas will be removed by divers utilizing very small hydraulic equipment that can pump dredged material only very short distances. Should this method be required, the roughly 380 cubic yards of material to be removed from Dredge Area IIA will be pumped approximately 250 feet to depression G-1 located on the bottom of Basin II, while the roughly 3,000 cubic yards of material to be removed from Dredge Area IIB will be pumped approximately 450 feet to deep depression G-2 located on the bottom of the main channel (Figure 3).

3. The City conducted a sediment characterization study to evaluate contaminant concentrations in the bottom sediments of King Harbor. Sediment samples were collected with a vibracore at twelve locations, four each within Areas I, II and III. Core samples were taken to a depth of approximately -20 feet Mean Lower Low Water in Areas I and III, and to approximately -12 feet in Area II. Three composite samples

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representing areas I, II and III, respectively, were analyzed for trace metal and trace organic concentrations, as well as grain size characteristics.

The sediments were very coarse-grained, ranging from 87.4% to 97.8% sand. The sediments were fairly free of contaminants, as most metals concentrations (arsenic, cadmium, chromium, copper, lead, nickel, selenium, silver, and zinc) and trace organic concentrations (DDTs, PCBs and PAHs) did not exceed the levels at which toxic effects to aquatic organisms may occur (Effects Range Low Guidelines developed by National Oceanographic and Atmospheric Administration). However, mercury concentrations in Areas I and II did exceed the levels at which toxic effects possibly could occur (Effects Range Low threshold), but did not exceed the levels at which toxic effects would be likely to occur (Effects Range High threshold).

4. 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 King Harbor. The requirements contained in this Order as they are met will be in conformance with the goals of the Water Quality Control Plan.
5. The beneficial uses of King Harbor waters are: industrial service supply, 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). The beneficial uses of the outer harbor waters are: navigation, water contact recreation, non-contact water recreation, commercial and sport fishing, marine habitat, wildlife habitat, and preservation of rare and endangered species.
6. The City adopted an Exemption Declaration (citing Chapter 3, Title 10, section 10-3.301(a) of the Redondo Beach Municipal Code) for the King Harbor Maintenance Dredging Project on January 22, 2003, pursuant to Public Resources Code section 21000 et seq. This exemption from the California Environmental Quality Act is based on section 15304(g) of the State CEQA Guidelines (44 CCR §15000 et seq.). The United States Army Corps of Engineers issued Permit No. 200301088-JLB on September 2, 2003 for maintenance dredging operations within King Harbor.
7. 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.
8. 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.

Table 1. Sediment Characteristics – King Harbor

Parameter	Area I	Area II	Area III	ERL Threshold	ERM Threshold	Samples Exceeding Thresholds
Sand	89.8 %	97.8%	87.4%	Not applicable	Not applicable	
Silt/Clay	9.2%	2%	10.6%	Not applicable	Not applicable	
Silver	<0.5 ppm	<0.5 ppm	<0.5 ppm	1 ppm	3.7 ppm	0 %>ERL 0%>ERM
Arsenic	0.80 ppm	<0.5 ppm	1.24 ppm	8.2 ppm	70 ppm	0 %>ERL 0%>ERM
Cadmium	<0.5 ppm	<0.5 ppm	<0.5 ppm	1.2 ppm	9.6 ppm	0 %>ERL 0%>ERM
Chromium	13.4 ppm	4.27 ppm	8.04 ppm	81 ppm	370 ppm	0 %>ERL 0%>ERM
Copper	11.4 ppm	6.43 ppm	6.19 ppm	34 ppm	270 ppm	0 %>ERL 0%>ERM
Mercury	0.29 ppm	0.30 ppm	0.11 ppm	0.15 ppm	0.71 ppm	67 %>ERL 0%>ERM
Nickel	6.76 ppm	1.77 ppm	3.99 ppm	21 ppm	51.6 ppm	0 %>ERL 0%>ERM
Lead	14.2 ppm	4.48 ppm	5.26 ppm	47 ppm	218 ppm	0 %>ERL 0%>ERM
Selenium	<0.5 ppm	<0.5 ppm	0.27 ppm	Not available	Not available	
Zinc	47.0 ppm	26.6 ppm	30.1 ppm	150 ppm	410 ppm	0 %>ERL 0%>ERM
Total DDT	<1 ppb	<1 ppb	<1 ppb	1.58 ppb	46.1 ppb	0 %>ERL 0%>ERM
Total PCB	<2 ppb	<2 ppb	<2 ppb	22.7 ppb	180 ppb	0 %>ERL 0%>ERM
Total PAH	<330 ppb	<330 ppb	<330 ppb	4022 ppb	44792 ppb	0 %>ERL 0%>ERM

ppm = parts per million; ppb = parts per billion; DDT = dichloro-diphenyl-trichloroethane; PCB = polychlorinated biphenyls; PAH = polynuclear aromatic hydrocarbons; ERL = Effects Range Low threshold; ERM = Effects Range Median threshold

The Regional Board has notified the City 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 City of Redondo Beach, 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 that 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 City 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 60,000 cubic yards of sediment, as proposed by the City.
2. The City 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 City 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 City 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 City 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 City 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 City 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, Title 23, 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 section 3867 of chapter 28 of division 3 of 23 CCR);
- 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 June 30, 2005.

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 June 10, 2004.

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DENNIS A. DICKERSON  
Executive Officer

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