



Los Angeles Regional Water Quality Control Board

May 7, 2013

Mr. Nick Buhbe
Director of Ecology
Great Ecology
1020 Prospect Street, Suite 310
La Jolla, CA 92037

WASTE DISCHARGE REQUIREMENTS EAGLE ROCK AGGREGATES, INC. MAINTENANCE DREDGING (FILE NO. 13-026)

Dear Mr. Buhbe:

Reference is made to our letter of March 4, 2013, which transmitted copies of tentative waste discharge requirements and a receiving water monitoring program for dredging and disposal of dredged material from the Eagle Rock Aggregates, Inc. Maintenance Dredging project at Pier D, Berth 44, Port of Long Beach, Los Angeles County.

In accordance with the California Water Code, this Board, at a public meeting held on May 2, 2013, at 9:00 a.m., Metropolitan Water District Board Room, 700 N. Alameda St., Los Angeles, California, reviewed the tentative requirements, considered all factors in the case and adopted Order No. R4-2013-0080 relative to this waste discharge (copy enclosed). The Standard Provisions, which were sent to you with the tentative requirements, were adopted without change and are part of this order.

All monitoring reports should be submitted electronically to the Regional Board via the GeoTracker database system (http://geotracker.waterboards.ca.gov). Reference all technical monitoring reports required by this Order to our Compliance File No. 9942. Please do not combine reports – each should be submitted as a separate document.

Should you have any questions, please telephone me at (213) 576-6718.

Sincerely,

J/MICHAEL LYONS

Staff Environmental Scientist

Enclosures

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

cc: Bill Orme, Non-point Source Unit, SWRCB
Jennifer Fordyce, Office of Chief Counsel, SWRCB
Larry Simon, California Coastal Commission (San Francisco)
Bill Paznokas, California Department of Fish and Game (San Diego)
John Markham, U.S. Army Corps of Engineers (Los Angeles)
Allan Ota, U.S. Environmental Protection Agency (San Francisco)
Carol Roberts, U.S. Fish and Wildlife Service (Carlsbad)
Bryant Chesney, National Marine Fisheries Service (Long Beach)
Kirsten James, Heal the Bay
Matt Arms, Port of Long Beach
Janna Watanabe, Port of Long Beach

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

ORDER NO. R4-2013-0080

WASTE DISCHARGE REQUIREMENTS FOR EAGLE ROCK AGGREGATES, INC (MAINTENANCE DREDGING) (FILE NO. 13-026)

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

- 1. Eagle Rock Aggregates, Inc., has filed an application for Waste Discharge Requirements (WDRs) for dredging and disposal operations associated with its terminal improvement project at Pier D, Berth 44 within the Port of Long Beach, Long Beach, California (Figure 1).
- 2. Eagle Rock Aggregates, Inc., plans to perform maintenance dredging In the vicinity of its existing terminal to ensure safe navigation for deep-draft vessels of the Panamax class during the continuing use of this facility as an aggregate receiving and storage terminal. No dredging has occurred at the site for at least the past 10 years.
- 3. Eagle Rock Aggregates, Inc., proposes to dredge a maximum of 6,000 cubic yards of material via a barge-operated clamshell bucket (Figure 2). The berthing area will be dredged to a depth of -44 feet mean lower low water (plus a 2-foot overdredge allowance). Existing water depths range from -40 to -44 feet mean lower low water in the project area. Advanced maintenance dredging also will be performed in a 2-foot sump area (Figure 2) to mitigate against future accumulation of sediments, helping to reduce the long-term frequency of recurring maintenance dredging operations. Dredging and disposal operations are expected to occur during May 2013 and the project duration is expected to be less than one week.

The 6,000 cubic yards of dredged material will be beneficially reused as construction material within the Port of Long Beach's Middle Harbor Redevelopment Project Phase 1 Slip Fill. Disposal of dredged material within this fill site is regulated by Board Order No. R4-2010-0020, adopted on February 4, 2010.

4. Sediment core samples were collected in July 2010 from 8 stations in the vicinity of the Eagle Rock Aggregates, Inc., facility (Figure 3). Cores D1, D2, D3 and D4 were composited for analysis of grain size, trace metals and trace organics (designated

as Site 1 composite) and Cores D5, D6, D7 and D8 also were composited for analysis (designated as Site 2 composite). The results of the sediment characterization study are summarized in Table 1. The sediments were comprised predominately of silt and clay (66.2 to 68.7%). The sediment concentrations of arsenic, nickel, lead, zinc, total DDT, total PCB and total PAH exceeded the thresholds at which adverse biological effects would be possible (Effects Range-Low, or ERL). The sediment concentrations of copper exceeded the level at which adverse biological effects would be probable (Effects Range-Median, or ERM). Despite the high levels of sediment contamination, placement of the dredged material within the Middle Harbor Redevelopment Project Phase 1 fill site would provide excellent contaminant and confinement of the contaminated material and prevent releases of contaminants into the environment.

- 5. The United States Corps of Engineers (COE) has received an permit application (2010-006-02) for the Eagle Rock Aggregates, Inc. maintenance dredging project and issued a public notice in March 2013 to solicit public comment on the proposed project. The COE plans to issue the final permit following the adoption of waste discharge requirements by the Los Angeles Regional Board.
- On April 15, 2013, the Long Beach Board of Harbor Commissioners approved the final Environmental Impact Report for the Eagle Rock Aggregates maintenance dredging project.
- 7. 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 Los Angeles-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.
- 8. The beneficial uses of Los Angeles-Long Beach Harbor (All Other Inner Areas) are: industrial process supply, navigation, water contact recreation (potential), non-contact water recreation, commercial and sport fishing, marine habitat, shellfish harvesting (potential), and preservation of rare, threatened or endangered species (one or more species utilize waters or wetlands for foraging and/or nesting).
- 9. 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. 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.

Parameter	Site 1 Composite	Site 2 Composite	Sediment screening thresholds
Sand	33.8 %	31.3 %	Not applicable
Silt	55.2 %	57.7 %	Not applicable
Clay	11.0 %	11.0 %	Not applicable
Silver	0.624 ppm	0.417 ppm	ERL = 1 ppm ERM = 3.7 ppm
Arsenic	15.9 ppm	14.9 ppm	ERL = 8.2 ppm ERM = 70 ppm
Cadmium	1.12 ppm	0.75 ppm	ERL = 1.2 ppm ERM = 9.6 ppm
Chromium	46.2 ppm	42.1 ppm	ERL = 81 ppm ERM = 370 ppm
Copper	110 ppm	93 ppm	ERL = 8.2 ppm ERM = 70 ppm
Mercury	1.25 ppm	0.78 ppm	ERL = 0.15 ppm ERM = 0.71 ppm
Nickel	23.9 ppm	23.8 ppm	ERL = 20.9 ppm ERM = 51.6 ppm
Lead	125 ppm	81.7 ppm	ERL = 46.7 ppm ERM = 218 ppm
Selenium	0.438 ppm	0.389 ppm	Not available
Zinc	376 ppm	249 ppm	ERL = 150 ppm ERM = 410 ppm
Total DDT ¹	10.3 ppb	19.2 ppb	ERL = 1.58 ppb ERM = 46.1 ppb
Total PCB ²	52/156.7 ppb	50/129.4 ppb	ERL = 22.7 ppb ERM = 180 ppb
Total PAH	5049 ppb	2358 ppb	ERL = 4022 ppb ERM = 44792 ppb

Footnote 1: analysis reported as "Total Pesticides", but only DDT was detected Footnote 2: analysis reported both as "Arochlors"/"Congeners" ppm = parts per million; ppb = parts per billion; DDT = dichloro-diphenyl-trichloroethane; PCB = polychlorinated biphenyls; PAH = polynuclear aromatic hydrocarbons; ERL = Effects Range-Low; ERM = Effects Range-Median

The Regional Board has notified Eagle Rock Aggregates, Inc. 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 Eagle Rock Aggregates, Inc.,, 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.
- 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. 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 of a maximum of 6,000 cubic yards of sediment from vicinity of the Eagle Rock Aggregates, Inc., and disposal of the dredged material within the Port of Long Beach's Middle Harbor Redevelopment Project Phase 1 Slip Fill, as described in Finding 3 above.
- 2. Eagle Rock Aggregates, Inc. 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 or disposal operations; written confirmation shall follow within one week.
- 3. A copy of this Order shall be made available at all times to project construction personnel.
- 4. Eagle Rocks Aggregates, Inc. shall provide the following information to the Regional Board:
 - a. A copy of the final permit issued by the United States Corps of Engineers for the dredge and disposal operations.
 - b. The scheduled date of commencement of each dredging and disposal operation at least one week prior to initiation of dredging.

- c. Notice of termination of dredging and disposal operations, within one week following the termination date.
- 5. Eagle Rock Aggregates, Inc. 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, Eagle Rock Aggregates, Inc. 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 Eagle Rock Aggregates, Inc. 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, 2013.

I, Samuel Unger, 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 May 2, 2013.

SAMUEL UNGER, P.E. Executive Officer

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Figure 1.

Location map for Eagle Rock Aggregates, Inc.
maintenance dredging project in Port of Long Beach.

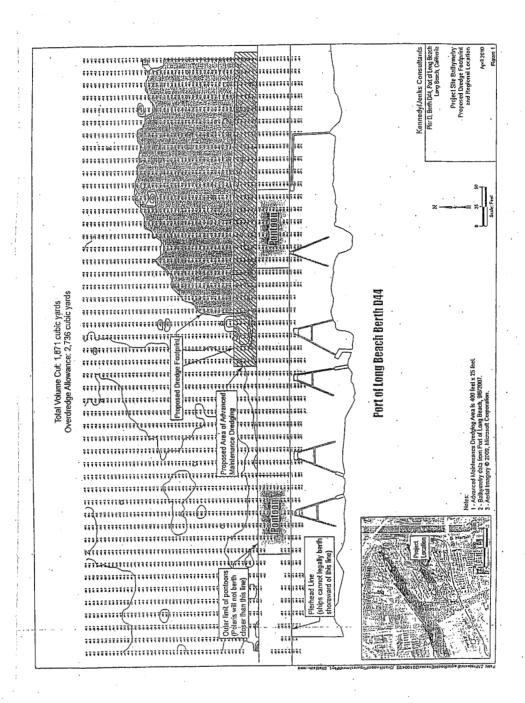


Figure 2.

Project location within the Port of Long Beach and delineation of proposed dredge footprint, including proposed area of advanced maintenance dredging.

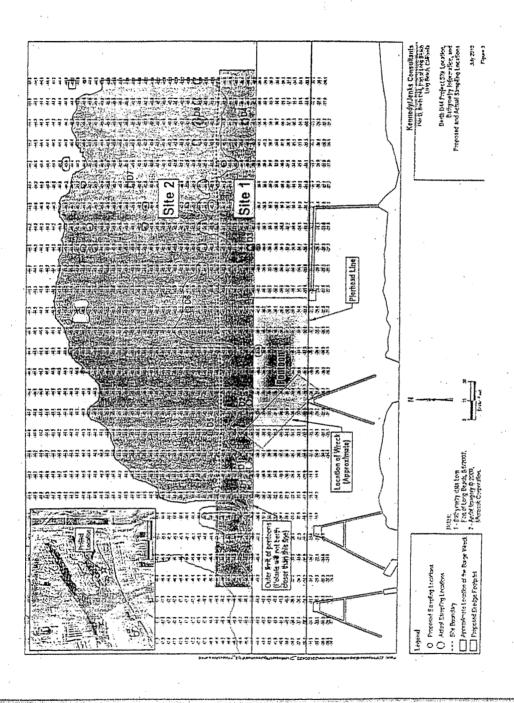


Figure 3. 2010 sediment sampling sites for Eagle Rock Aggregates, Inc. maintenance dredging project.

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

MONITORING AND REPORTING PROGRAM NO. 9942 FOR EAGLE ROCK AGGREGATES, INC (MAINTENANCE DREDGING) (FILE NO. 13-026)

1. Receiving Water Monitoring

The following sampling protocol shall be undertaken by Eagle Rock Aggregates, Inc., during the proposed dredging 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 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:

Station	<u>Description</u>	
. A	30.5 meters (100 feet) up current of the dredging operation permitting.	ns, safety
В	30.5 meters (100 feet) down current of the dredging operation permitting.	ns, safety
С	91.5 meters (300 feet) down current of the dredging operations.	
D E	Control site (area not affected by dredging operations). 15.2 meters (50 feet) from the return water discharge point.	

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 Light transmittance ¹ pH ¹ Suspended solids ³	mg/l % Transmittance pH units mg/l	A-E """ """	Weekly ² " " "

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.

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Water column light transmittance values from Stations C and D, as well as from Stations E 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). If the difference in % light transmittance between stations C and D, or between stations E and D, for the near surface or mid-water or bottom is 30% or greater, 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.

In the event that the water column light transmittance values from Stations C and D, or from Stations E and D, exceed the 30% trigger described above, Eagle Rock Aggregates, Inc., shall conduct the standard water quality monitoring described above for three consecutive days following the date of exceedance. Eagle Rock Aggregates, Inc., 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 the transmissivity exceedance. Eagle Rock Aggregates, Inc., 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, Eagle Rock Aggregates, Inc., 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.

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.

Eagle Rock Aggregates, Inc., 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;

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- 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 California Department of Public Health, Environmental Laboratory Accreditation Program (ELAP), or approved by the Executive Officer.

Eagle Rock Aggregates, Inc., 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 Eagle Rock Aggregates, Inc., 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.

5. Reporting

Monitoring reports shall be submitted within 10 days following each weekly sampling period. In reporting, the Eagle Rock Aggregates, Inc., 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 California Department of Public Health or approved by the Executive Officer and in accordance with current EPA guidelines or as specified in the Monitoring Program.

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For any analysis preformed 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.

6. General Provisions for Reporting

For every item where the requirements are not met, Eagle Rock Aggregates, Inc., 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:

Samuel Unger, P.E. Executive Officer

Date: May 2, 2013