Los Angeles Regional Water Quality Control Board

December 11, 2014

Mr. Antonio V. Gioiello
Chief Harbor Engineer, Port of Los Angeles
Post Office Box 151
San Pedro, CA 90733-0151

TENTATIVE WASTE DISCHARGE REQUIREMENTS
BERTH 161 MARINE WAYS MODIFICATION (FILE NO. 14-111)

Dear Mr. Gioiello:

We have completed our review of your application to this Board for waste discharge requirements for your proposed discharge of wastes. Enclosed are copies of tentative waste discharge requirements (WDRs) and a receiving water monitoring program for dredging and disposal of dredged material from the Berth 161 Marine Ways Modification Project, Port of Los Angeles, Los Angeles County. A copy of our Standard Provisions, General Monitoring and Reporting Requirements (Attachment N) also is enclosed.

In accordance with the California Water Code, this Board, at a public meeting to be held on February 12, 2015, at 9:00 a.m., at the Metropolitan Water District Board Room, located at 700 N. Alameda St., Los Angeles, California, will consider the enclosed tentative requirements and comments submitted in writing regarding any or all portions thereof. The Board will hear any testimony pertinent to these discharges and the tentative requirements. It is expected that the Board will take action at the hearing; however, as testimony indicates, the Board at its discretion may order further investigation.

Written comments and any exhibits must be submitted to the Executive Officer not later than **January 16, 2015**. Failure to comply with this requirement is grounds for the Regional Board to refuse to admit the proposed written comment or exhibit into evidence (Title 23 CCR Section 648.2). If materials are not submitted in a timely manner, the Regional Board may refuse to admit written testimony into evidence unless the proponent can demonstrate why he or she was unable to submit the material on time or that compliance with the deadline would otherwise create a hardship. If any other party demonstrates prejudice resulting from admission of written testimony or exhibits not timely submitted, the Regional Board may refuse to admit it.

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

Sincerely,

J. MICHAEL LYONS
Staff Environmental Scientist

Enclosures

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)
Theresa Stevens, U.S. Army Corps of Engineers (Ventura)
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)
Peter Shellenbarger, Heal the Bay
Kat Prickett, Port of Los Angeles
Kathryn Curtis, Port of Los Angeles
Edward Han, Port of Los Angeles

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

ORDER NO. R4-2015-XXXX

WASTE DISCHARGE REQUIREMENTS FOR PORT OF LOS ANGELES (BERTH 161 MARINE WAYS MODIFICATION) (FILE NO. 14-111)

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

1. The Port of Los Angeles (POLA) has filed an application for Waste Discharge Requirements for improvements at the Berth 161 Marine Ways facility in Los Angeles Harbor, Los Angeles County.

2. The project area is located in the Slip 1 area of Los Angeles Harbor (Figure 1). The project involves construction to improve containment of work debris and runoff on the marine railway and boat launch ramp near Berth 161. Project improvements consist of dredging, grading and paving, installation of approximately 50 feet of trench drain and catch basin, installation of a clarifier, construction of a coffer dam, and installation of a crane to operate the coffer dam. A backhoe will be used to dredge approximately 1 foot of surface material from the harbor bottom within the project dredge footprint, removing a maximum of approximately 800 cubic yards of material (Figure 2).

3. A sediment characterization study was conducted for Berth 161 in June 2013. Core samples were collected at four locations within the area of Berth 161 and combined into two composite samples (Composite A and Composite B) for grain size determinations, toxicity testing, bioaccumulation testing and chemical analyses (Figure 2). The initial bulk chemistry testing results indicated that the dredged material might be classified as hazardous waste, due to the fact that concentrations of several metals and organic compounds exceeded pre-defined trigger levels (Tables 1 and 2). Consequently, a second round of chemical testing including leaching analysis was conducted for copper and lead. The leachate test results demonstrate that the dredged material would be classified as hazardous waste, since copper and lead exceeded the Soluble Threshold Limit Concentrations (STLC) established as regulatory thresholds (25.0 milligrams per liter for copper, 5.00 milligrams per liter for lead).

   Hazardous waste must be disposed of within a class 1 landfill. POLA proposes to

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dispose of the dredged material at a permitted class 1 landfill, such as the US Ecology facility in Beatty, Nevada, the Chemical Waste Management facility in Arlington, Oregon, or the Clean Harbors facility in Buttonwillow, California.

Construction of the project will be performed in the dry, behind a coffer dam. Soil will be removed with an excavator, then stockpiled for testing required by the selected disposal facility. Any water that may enter the construction area behind the coffer dam will be collected and placed into a baker tank for testing and proper disposal. The areas around the stockpiles will be bermed to collect any water and allow for testing and proper disposal.

The material remaining on the harbor bottom that would be exposed by the dredging operation also contains elevated levels of numerous contaminants, particularly several metals, PAHs and PCBs. POLA proposes to cover this area with pavement, which will consist of six inches of crushed miscellaneous base and six inches of concrete, forming a cap that will prevent exposure of these sediments to water.

4. The United States Corps of Engineers (COE) has granted conditional approval for dredging of Berth 161 under Nationwide Permit 3.

5. The Los Angeles Harbor Department adopted a Categorical Exemption for the Berth 161 Marine Ways Modification project on December 10, 2014.

6. 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.

7. 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).

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.

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Table 1. Sediment Characteristics (2013) – Berth 161 Project.

Parameter	Composite A	Composite B	Sediment screening thresholds
Grain size: Sand/Gravel	24.1 %	47.8 %	
Grain size: Silt and Clay	75.9 %	52.2 %	
Silver	0.267 ppm	0.273 ppm	ERL = 1 ppm ERM = 3.7 ppm
Arsenic	25.7 ppm	19.9 ppm	ERL = 8.2 ppm ERM = 70 ppm
Cadmium	1.22 ppm	1.12 ppm	ERL = 1.2 ppm ERM = 9.6 ppm
Chromium	44.0 ppm	34.8 ppm	ERL = 81 ppm ERM = 370 ppm
Copper	2210 ppm	2520 ppm	ERL = 8.2 ppm ERM = 70 ppm
Mercury	6.59 ppm	2.26 ppm	ERL = 0.15 ppm ERM = 0.71 ppm
Nickel	34.9 ppm	27.5 ppm	ERL = 20.9 ppm ERM = 51.6 ppm
Lead	353 ppm	384 ppm	ERL = 46.7 ppm ERM = 218 ppm
Selenium	0.370 ppm	0.303 ppm	Not available
Zinc	922 ppm	834 ppm	ERL = 150 ppm ERM = 410 ppm
Total DDT	<1.2 ppb	<1.2 ppb	ERL = 1.58 ppb ERM = 46.1 ppb
Total PCB	165 ppb	222 ppb	ERL = 22.7 ppb ERM = 180 ppb
Total PAH	28,840 ppb	37,660 ppb	ERL = 4022 ppb ERM = 44792 ppb

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

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Table 2. Berth 161 Sediment Chemistry Results Compared to Hazardous Waste Criteria.

Parameter	Composite A	Composite B	TTLC	STLC Trigger Level	TCLP Trigger Level
Silver	0.216 mg/kg	0.233 mg/kg	500 mg/kg	50 mg/kg	100 mg/kg
Arsenic	20.8 mg/kg	17.0 mg/kg	500 mg/kg	50 mg/kg	100 mg/kg
Cadmium	0.985 mg/kg	0.959 mg/kg	100 mg/kg	10 mg/kg	20 mg/kg
Chromium	35.6 mg/kg	29.8 mg/kg	2500 mg/kg	50 mg/kg	100 mg/kg
Copper	1786 mg/kg	2157 mg/kg	2500 mg/kg	250 mg/kg	---
Mercury	5.32 mg/kg	1.93 mg/kg	20 mg/kg	2.0 mg/kg	4.0 mg/kg
Nickel	28.2 mg/kg	23.5 mg/kg	2000 mg/kg	200 mg/kg	---
Lead	285 mg/kg	329 mg/kg	1000 mg/kg	50 mg/kg	100 mg/kg
Selenium	0.299 mg/kg	0.259 mg/kg	100 mg/kg	10 mg/kg	20 mg/kg
Zinc	745 mg/kg	714 mg/kg	5000 mg/kg	2500 mg/kg	---
Total DDT	Not detected	Not detected	1000 mg/kg	1.0 mg/kg	---
Total PCB	133 mg/kg	190 mg/kg	50000 mg/kg	50 mg/kg	---
Total PAH	23303 mg/kg	32237 mg/kg	---	---	---

Mg/kg = milligrams per kilogram; TTLC = Total threshold limit concentration; STCL = Soluble Threshold Limit Concentration; TCLP = Toxicity characteristic leaching procedure; DDT = dichloro-diphenyl-trichloroethane; PCB = polychlorinated biphenyls; PAH = polynuclear aromatic hydrocarbons

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The Regional Board has notified the Port of Los Angeles 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.

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.

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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 800 cubic yards of sediment and soil, with disposal at a designated class 1 disposal facility.

2. POLA 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. POLA 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.

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5. POLA 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, POLA 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 POLA 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, 2016.

I, Samuel Unger, P.E., 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 February 12, 2015.

SAMUEL UNGER, P.E.
Executive Officer

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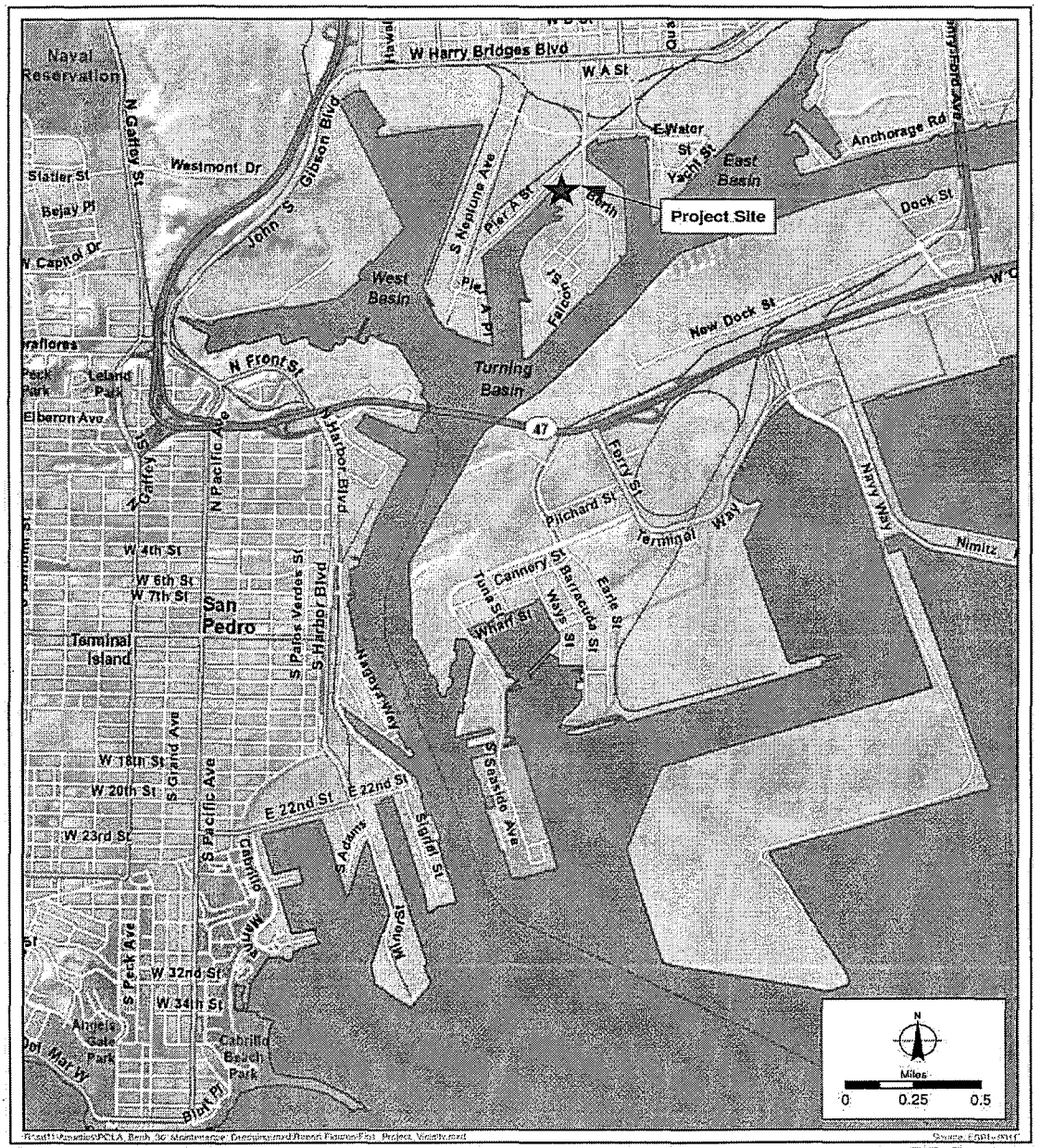

Project Vicinity
Berth 161 Sediment Characterization Study
Port of Los Angeles

FIGURE
1-1

Figure 1. Location map for Berth1 Marine Ways Modification Project in Los Angeles Harbor.

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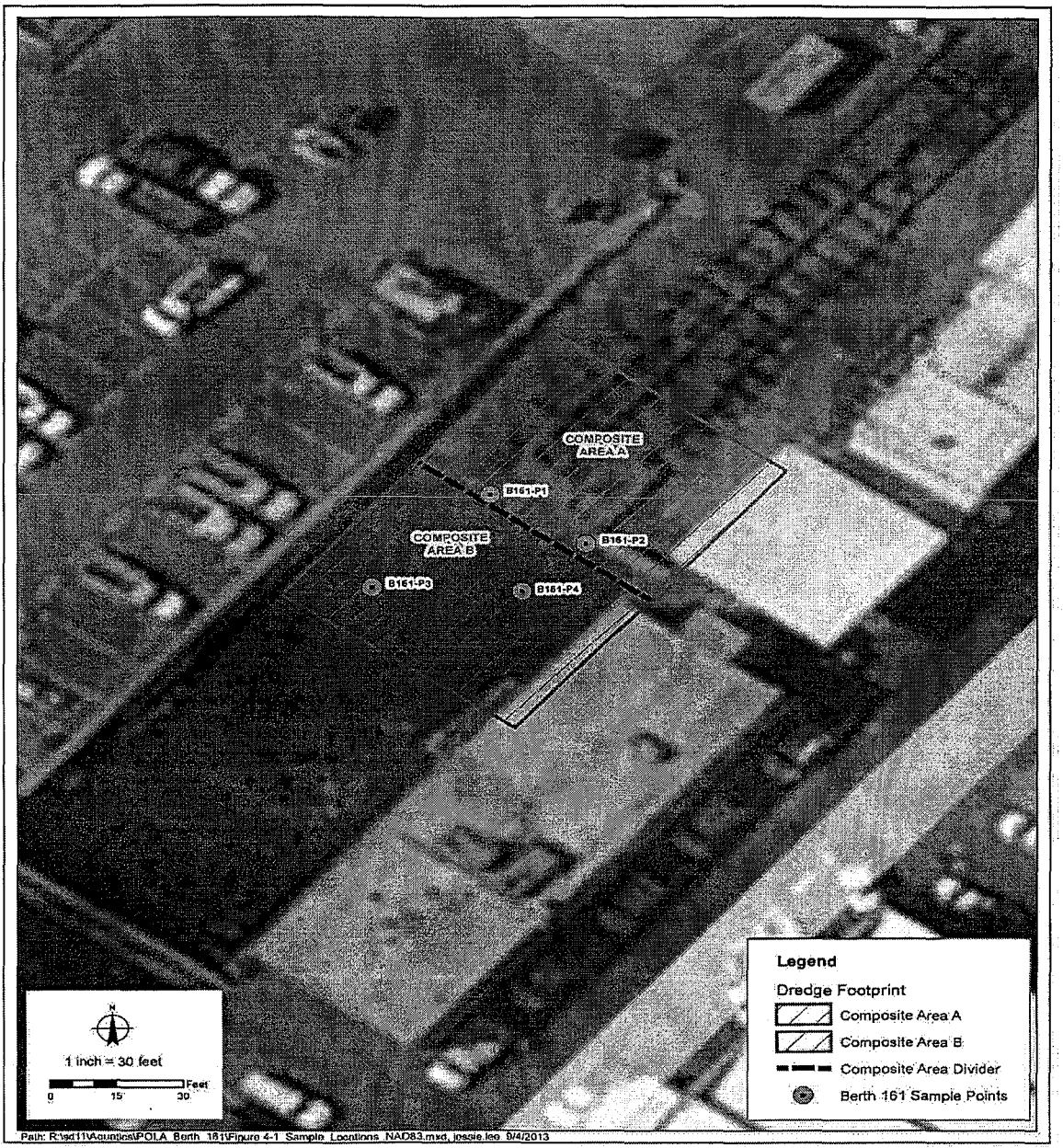

Sampling Locations
Berth 161 Sediment Characterization Study
Port of Los Angeles

FIGURE
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Figure 2. Sample locations for Berth 161 sediment characterization study and dredging footprint.

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

MONITORING AND REPORTING PROGRAM NO. xxxxx
FOR
PORT OF LOS ANGELES
(BERTH 161 MARINE WAYS MODIFICATION)
(FILE NO. 14-111)

1. Receiving Water Monitoring

The following sampling protocol shall be undertaken by the Port of Los Angeles (POLA) during the proposed dredging project and eelgrass mitigation 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	Description
A	Station A is located approximately 200 feet beyond the construction project boundary. This station represents an early-warning screening station to determine if Best Management Practices may need to be implemented.
B	Station B is located approximately 300 feet beyond the construction project boundary. This station defines the dredging mixing zone boundary, beyond which temporary water quality impacts related to dredging activities are not to occur.
C	Station C 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 B.

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The following shall constitute the receiving water monitoring program:

Water Column

Monitoring Parameters	Units	Station	Frequency
Dissolved oxygen[1]	mg/l	A-C	Weekly[2]
Light transmittance[1]	% Transmittance	" "	"
pH[1]	pH units	" "	"
Suspended solids[3]	mg/l	" "	"

[1]Measurements shall be taken throughout the water column (at a minimum, at 2-meter increments).
[2]During the first two weeks of dredging, stations shall be sampled two times per week.
[3]Mid-depth shall be sampled

Water column light transmittance values from Stations A and C, and from Stations B and C 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 A and C (for the near surface, mid-water or bottom) is 30% or greater, POLA shall notify the contractor and implement additional BMPs to reduce turbidity. Stations B and C shall be resampled after BMPs have been in place for at least 2 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 the first exceedance, but will be required on days two and three whenever subsequent exceedance events occur). 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 B and C exceed the 30% trigger described above, POLA shall conduct light transmittance monitoring described above daily until two consecutive days with no exceedances have been demonstrated. POLA 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. POLA 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, POLA 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.

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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.

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

POLA 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 POLA 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, POLA 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.

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, POLA 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: February 12, 2015

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