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**Santa Ana Regional Water Quality Control Board**

July 23, 2012

Adam Gale  
Anchor QEA, L.P.  
26300 La Alameda, Suite 240  
Mission Viejo, California 92691

**CLEAN WATER ACT SECTION 401 WATER QUALITY STANDARDS  
CERTIFICATION FOR THE LINDA ISLE/HARBOR ISLAND MAINTENANCE  
DREDGING PROJECT, COUNTY OF ORANGE, CALIFORNIA (SPL-2012-00248-  
JDG) (SARWQCB PROJECT NO. 302012-18)**

Dear Mr. Gale:

On April 9, 2012, we received an application for Clean Water Act Section 401 Water Quality Standards Certification ("Certification") from Anchor QEA L.P. on behalf of the City of Newport Beach and the County of Orange (City and County) for a project to dredge approximately 60,000 cubic yards of sediment from within City-owned and County-owned portions of the navigational channel between Linda Isle and Harbor Island. Dredged sediment will be disposed of at the U.S. EPA's LA-3 Ocean Dredged Material Disposal Site (LA-3).

We also received a separate application for dredging approximately 5,000 cubic yards of sediment from the same area that does not meet the requirements for disposal at LA-3 due to elevated mercury concentrations. At your request, this smaller project has been combined with the larger dredging project.

This letter responds to your request for certification that the proposed project, described in your application and summarized below, will comply with State water quality standards outlined in the Water Quality Control Plan for the Santa Ana River Basin (1995) (Basin Plan) and subsequent Basin Plan amendments:

**Project Description:**

The project consists of dredging approximately 65,000 cubic yards of sediment to restore the navigational channel to its design depth of -8 feet below mean lower low water (MLLW) with an additional two feet of overdredge allowed.

CAROLE H. BESWICK, CHAIR | KURT V. BERCHTOLD, EXECUTIVE OFFICER

Dredging will be performed using a barge-mounted clamshell. Approximately 60,000 cubic yards of dredged sediment will be disposed of at LA-3. Approximately 5,000 cubic yards of sediment has been determined unsuitable for disposal at LA-3 because of elevated mercury concentrations. This material will be disposed of at the Port of Long Beach's Middle Harbor Fill Site. The project will take place within Section 27 of Township 6 South, Range 10 West, of the U.S. Geological Survey *Newport Beach, Calif.* quadrangle map (33° 36' 40.75" N/ 117° 54' 05.66" W).

Receiving water: Lower Newport Bay

Fill area: 6.33 acres of temporary impact to marine environment.

Dredge/Fill volume: 65,000 cubic yards

Federal permit: Rivers and Harbors Act Section 10

You have proposed to mitigate water quality impacts as described in your Certification application. The proposed mitigation is summarized below:

**Onsite Water Quality Standards Mitigation Proposed:**

- Standard water quality related best management practices (BMPs) will be employed during construction activities, including use of a silt curtain

**Offsite Water Quality Standards Mitigation Proposed:**

- Approximately 20,267 square feet (0.465 acres) of eelgrass is located within the area to be dredged. Eelgrass mitigation will be performed in accordance with the requirements of the Southern California Eelgrass Mitigation Plan (SCEMP). The City and County have developed a mitigation plan that identifies a transplant location southwest of Little Balboa Island in Lower Newport Bay. The mitigation area will be oversized in relation to the required SCEMP mitigation ratio in order to ensure compliance with the SCEMP after accounting for losses.

**Findings:**

The City and County collected samples of the sediment proposed for dredging in October 2011, using ten sediment cores distributed across the project site. Detailed chemistry data were obtained from two composite cores, supplemented by additional mercury data from the individual cores.

Concentrations of total DDT and mercury in one of the two composite samples were elevated relative to sediment quality guidelines published by the National Oceanic and Atmospheric Administration (NOAA). Mercury was also elevated above NOAA

guidelines in three of the individual cores, but only one of these exceeded the U.S. EPA's limit for disposal at LA-3.

Based on analysis of the sediment cores, sediments in the project area were generally characterized as silty clay with an underlying layer of coarse sand. Organic pollutants in Lower Newport Bay are known to be associated with the silt/clay sediments that overlie native sands. The project is expected to remove the silt and leave a residual surface layer dominated by sandy sediment. This is expected to result in greatly reduced organic contaminant levels in surface sediments.

The U.S. EPA has established technical Total Maximum Daily Loads (TMDLs) for metals (copper, lead, selenium, zinc) and organics (chlordane, dieldrin, DDT, PCBs) in Lower Newport Bay. The Regional Board has also adopted nutrient (nitrogen and phosphorus) TMDLs for the lower bay. Dredging the Linda Isle/Harbor island navigational channel to design depths will help implement the TMDLs for Lower Newport Bay by removing the most contaminated silty-clay sediment layer and exposing the underlying native sands.

One threatened and/or endangered species, the California least tern (*Sterna antillarum browni*) occurs in the project area. The U.S. Fish and Wildlife Service has determined that with implementation of BMPs including silt curtains, the project will have no effect on the California least tern.

According to long-term monitoring data collected by the County of Orange, natural background turbidity in Lower Newport Bay is below 50 Nephelometric Turbidity Units (NTUs) except during storm events. In more recent data collected from reference monitoring stations established for the U.S. Army Corps of Engineers' Lower Newport Bay maintenance dredging project, TSS ranged from 4.1 to 6.3 mg/L, transmissivity ranged from 35 to 73 percent, and turbidity ranged from 0 to 17 NTU. For waters with natural turbidity less than 50 NTU, the Basin Plan specifies a water quality objective for turbidity as a maximum increase not to exceed 20% as a result of controllable water quality factors. To implement this objective, this certification specifies numeric limits at specific distances from the active dredging area for TSS, transmissivity, and turbidity.

Pursuant to the California Environmental Quality Act ("CEQA"), the City of Newport Beach and the Regional Board have independently determined that the proposed project is categorically exempt from provisions of CEQA under Guidelines Section 15304 (g) Minor Alterations to Land – "Maintenance dredging where the spoil is deposited in a spoil area authorized by all applicable state and federal regulatory agencies." The U.S. EPA approved disposal of dredged sediments from this project at LA-3 on February 22, 2012. The Los Angeles Regional Water Quality Control Board has issued WDRs and CWA 401 Certification to the Port of Long Beach Middle Harbor Redevelopment Project (Order No. R4-2010-0020) for disposal of contaminated sediment.

**This 401 Certification is contingent upon the execution of the following conditions:**

1. Caulerpa: The City and County must conduct at least one visual survey for the invasive algae *Caulerpa taxifolia* at low tide prior to initiating dredging. If *Caulerpa taxifolia* is discovered, the City and County must not begin dredging. The City and County must notify Regional Board staff, the California Department of Fish and Game (CDFG) (William Paznokas: 858-467-4218, ([wpaznokas@dfg.ca.gov](mailto:wpaznokas@dfg.ca.gov)) and/or the National Marine Fisheries Service (NMFS) (Eric Chavez: 562-980-4064, [Eric.Chavez@noaa.gov](mailto:Eric.Chavez@noaa.gov)) within 24-hours of discovery. The City and County may begin dredging after implementing management measures specified by the CDFG and/or NMFS. Although a *Caulerpa* survey conducted in March 2012 found no *Caulerpa taxifolia*, the survey is now outside the acceptable timeframe (30 to 90 days prior to project initiation) specified by the *Caulerpa* Control Protocol (<http://swr.nmfs.noaa.gov/hcd/caulerpa/ccp.pdf>).
2. Eelgrass: Although an eelgrass survey conducted in March 2012 found 0.456 acres of eelgrass within the project area, a new eelgrass survey must be conducted within two months of the commencement of dredging, and mitigation for projected eelgrass impacts must be performed in accordance with the Southern California Eelgrass Mitigation Plan (SCEMP) requirements ([http://swr.nmfs.noaa.gov/hcd/policies/EELPOLrev11\\_final.pdf](http://swr.nmfs.noaa.gov/hcd/policies/EELPOLrev11_final.pdf))
3. Best Management Practices:
  - a. A continuous, floating silt curtain shall be deployed around active dredging areas.
  - b. Operational BMPs such as reduction in dredging rate, modification of clamshell operation, use of favorable tidal conditions to minimize turbidity, and temporary suspension of dredging shall be employed as necessary.
  - c. All materials generated from construction activities associated with this project shall be managed appropriately. This shall include identifying all potential pollution sources associated with the project, and incorporating all necessary pollution prevention BMPs for each potential pollution source identified.
4. Receiving Water Limitations: The City and County must comply with the following applicable narrative and/or numeric objectives:
  - a. Narrative Objectives for Physical Characteristics: Wastes associated with the dredging operation shall not violate Basin Plan narrative objectives for color, floatables, and oil and grease

- i. Waste discharges shall not result in coloration of the receiving waters which causes a nuisance or adversely affects beneficial uses.
  - ii. Waste discharges shall not contain floating materials, including solids, liquids, foam or scum, which cause a nuisance or adversely affect beneficial uses.
  - iii. Waste discharges shall not result in deposition of oil, grease, wax, or other materials in concentrations which result in a visible film or in coating objects in the water, or which cause a nuisance or adversely affect beneficial uses.
  
- b. **Numeric Limits for Physical/Chemical Characteristics:** The City and County must comply with the numeric receiving water limitations specified in Table 1. Data shall be collected at a distance of 100 feet and 300 feet from the dredge, except as specified in (i) below. The turbidity and transmittance limits in Table 1 are based on recent data collected in Lower Newport Bay, and shall be applied as follows:
  - i. Areas with contiguous eelgrass beds outside the dredge footprint - TSS concentrations shall not exceed 15 mg/L at the boundary of the eelgrass bed. Based on recent data collected by Anchor QEA in Lower Newport Bay, this is generally equivalent to transmissivity of 38% and turbidity of 16 NTU. If water quality monitoring at the 300 feet station suggests a potential impact to biological resources, then confirmatory monitoring will be conducted at the closest eelgrass boundary within 500 ft of active dredging operations. If there is an exceedance of these transmissivity and turbidity values at the target monitoring point, the condition will be monitored for prolonged exposure. If these conditions persist for 1 week or longer, then dredging operations shall include BMPs to reduce turbidity and increase transmissivity while dredging in the vicinity of eelgrass beds. If after 1 week of conditions where TSS is predicted to be greater than 15 mg/L, then dredging operations shall move off site for at least 1 week to allow the eelgrass bed to recover.
  
  - ii. Areas without eelgrass beds - TSS concentrations shall not exceed 50 mg/L, 300 feet from the dredge. Based on recent data collected by Anchor QEA in Lower Newport Bay, this is generally equivalent to transmissivity of 16% and turbidity of 47 NTU. If there is an exceedance of these transmissivity and turbidity values at 300 feet in the mid-water column, then monitoring will be conducted the following day to ensure that this level has not been sustained for greater than 24 hours. If elevated suspended sediments occur for greater than 24 hours, then dredging operations shall be altered to include BMPs to reduce turbidity and increase transmissivity.

**Table 1: Numeric Receiving Water Limitations**

Parameter	Receiving Water Limitation	
	Eelgrass Areas	Non-Eelgrass Areas
TSS	15 mg/L	50 mg/L
Transmissivity	38%	16%
Turbidity	16 NTU	47 NTU
pH	7 < pH < 8.6; < 0.2 unit change from ambient	
Dissolved Oxygen	> 5 mg/L	

5. Monitoring:

- a. Minimum Monitoring Program: The City and County must implement a monitoring program to ensure compliance with the receiving water limitations specified above in Condition 4. Minimum requirements of the monitoring plan are listed in Table 2.

**Table 2: Minimum Monitoring Program**

Locations	Monitored Analytes	Frequency
300 feet from dredge and if applicable, at boundary of eelgrass bed located within 500 feet of the dredge (see Condition 4.b.i)	Turbidity	Daily during first week, weekly thereafter
	Transmittance	
	Dissolved Oxygen	
	pH	
	TSS	Weekly
	Nitrate-Nitrogen	
	Total Kjeldahl Nitrogen	
Total Phosphorus		

- b. General Monitoring Provisions:
  - 1. All sampling, sample preservation, and analytical procedures shall be in accordance with the current approved edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association) and/or 40 CFR Part 136 approved methods unless otherwise specified by the Executive Officer of the Regional Board.
  - 2. In accordance with the provision of Water Code section 13176, chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health or at laboratories approved by the Regional Board's Executive Officer.

3. The City and County shall have and implement an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.
4. All monitoring instruments and devices used by the City and County to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the City and County shall obtain a representative grab sample each day the equipment is out of service. The City and County shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the City and County shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the City and County is taking or proposes to take to bring the equipment back into service and the schedule for these actions.
5. Monitoring and reporting shall be in accordance with the following:
  - i. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - ii. Monitoring and reporting shall be done more frequently as necessary to maintain compliance with this certification and or as specified in this certification.
  - iii. Whenever the City and County monitors any pollutant more frequently than is required by this certification, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.
  - iv. Daily samples shall be collected on each day of the week.
  - v. Weekly samples shall be collected on any representative day of each week.
  - vi. Monthly samples shall be collected on any representative day of each month.
6. Reporting: The City and County shall comply with the following conditions:
  - a. All analytical data shall be reported with method detection limit<sup>1</sup> (MDLs) and with identification of either reporting level or limits of quantitation (LOQs). To the maximum extent practicable, all MDLs shall be sufficiently low enough to compare analytical results for water and sediment samples to the values

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<sup>1</sup> The standardized test procedure to be used to determine the method detection limit (MDL) is given at Appendix B, "Definition and Procedure for the Determination of the Method Detection Limit" of 40 CFR 136.

listed above under Condition #2: "Receiving Water Limitations and Specifications."

- b. Laboratory data must quantify each constituent down to the approved reporting levels for specific constituents. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Board will reject the quantified laboratory data if quality control data are unavailable or unacceptable.
- c. Monitoring data shall be submitted in a format acceptable by the Regional Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this certification shall be reported to the Regional Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this certification.
- d. The City and County shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the certification.
- e. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the City and County will be in compliance. The City and County shall notify the Regional Board by letter when compliance with the time schedule has been achieved.
- f. The City and County shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Board at any time.
- g. All reports and/or information submitted to the Regional Board shall be signed by a responsible officer or duly authorized representative of the City and County and shall be submitted under penalty of perjury.
- h. The City and County shall submit monthly reports via e-mail to the assigned Regional Board staff identified in this certification by the 7<sup>th</sup> day of each month. The monthly reports shall include a copy of the laboratory reports for samples collected during the previous month, as well as a brief description of project activities conducted during the previous month.
- i. A final water quality monitoring report summarizing the project data and correcting any errors and/or omissions in the monthly reports shall be

submitted to the Regional Board no later than six months after completion of the project.

7. A copy of this Certification must remain at the project site for the duration of the work and be available for inspection upon request.

Under California Water Code, Section 1058, and Pursuant to 23 CCR §3860, the following shall be included as conditions of all water quality certification actions:

(a) Every certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section §13330 of the Water Code and Article 6 (commencing with Section 3867) of this Chapter.

(b) Certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a FERC license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to Subsection §3855(b) of this Chapter and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

(c) Certification is conditioned upon total payment of any fee required under this Chapter and owed by the applicant.

If the above stated conditions are changed, any of the criteria or conditions as previously described are not met, or new information becomes available that indicates a water quality problem, the Regional Board may require the applicant to submit a report of waste discharge and obtain Waste Discharge Requirements.

In the event of any violation or threatened violation of the conditions of this certification, the holder of any permit or license subject to this certification shall be subject to any remedies, penalties, process or sanctions as provided for under state law. For purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.

Violations of the conditions of this certification may subject the applicant to civil liability pursuant to Water Code section 13350 and/or 13385.

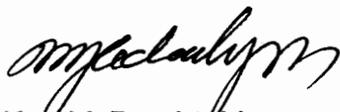
This letter constitutes a Water Quality Standards Certification issued pursuant to Clean Water Act Section 401. I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and

307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ (Order No. 2003-0017-DWQ), "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received Water Quality Certification" which requires compliance with all conditions of this Water Quality Standards Certification. Order No. 2003-0017-DWQ is available at:

[www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0017.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf)

Should there be any questions, please contact Doug Shibberu at (951) 782-7959, or Mark Adelson at (951) 782-3234.

Sincerely,

*for* 

Kurt V. Berchtold  
Executive Officer  
Santa Ana Regional Water Quality Control Board

cc (via electronic mail):

State Water Resources Control Board, Office of Chief Counsel – David Rice  
State Water Resources Control Board, DWQ -Water Quality Certification Unit – Bill Orme  
U. S. Army Corps of Engineers, Los Angeles Office – Jim Green  
U. S. Fish and Wildlife Service - Jon Avery  
U. S. Fish and Wildlife Service - Christine Medak  
California Department of Fish and Game – Loni Adams  
City of Newport Beach – Chris Miller  
County of Orange – Susan Brodeur

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