

# BEFORE THE STATE WATER RESOURCES CONTROL BOARD

**In the Matter of the California Regional Water Control Board - Los Angeles Region's Issuance of Order R4-2014-0228, Waste Discharge Requirements for Port of Los Angeles (Berths 212-224 Redevelopment)(File No. 14-097) Issued December 4, 2014.**

**CITY OF LOS ANGELES HARBOR DEPARTMENT'S PETITION FOR REVIEW**

## PETITION FOR REVIEW

Pursuant to Section 13320 of the California Water Code and Section 2050 of Title 23 of the California Code of Regulations, the Harbor Department of the City of Los Angeles, also known as the Port of Los Angeles, ("Petitioner") petitions the State Water Resources Control Board to review the December 4, 2014 action of the California Regional Water Quality Control Board, Los Angeles Region in issuing Order R4-2014-0228, Waste Discharge Requirements for Port of Los Angeles (Berths 212-224 Redevelopment)(File No. 14-097)("Order"). A copy of the Order is attached as Exhibit 1.

### **1. Name, Address, Telephone Number and Email Address Of Petitioner.**

Petitioner is:

The City of Los Angeles, Harbor Department  
Attn: Mr. Antonio Gioiello  
Chief Harbor Engineer  
425 S. Palos Verdes St.  
San Pedro, CA 90731-0151  
310-732-3877  
tgioiello@portla.org

Petitioner Requests that copies of all communications relating to this petition also be sent to:

Michael N. Feuer, City Attorney  
Janna P. Sidley, General Counsel  
Kenneth F. Mattfeld, Deputy  
425 S. Palos Verdes St.  
San Pedro, CA 90731-0151  
310-732-3750  
kmattfeld@portla.org

**2. Specific Action Or Inaction Of The Regional Board That The State Board Is Requested**

**To Review.**

The Order, which contains Waste Discharge Requirements (“WDRs”) for dredging in the Los Angeles Harbor prohibits ocean disposal of 21,800 cubic yards of dredged material at the LA-2 Disposal Site. Said prohibition is improper because the LA-2 Site is subject to exclusive federal jurisdiction and because the Order conflicts with federal permitting authority. The prohibition was not included in the Tentative WDRs but was inserted as a staff recommendation the day before the hearing on the Order.

To illustrate, the Regional Board’s Tentative WDRs, issued three months earlier, permitted ocean disposal of 21,800 cubic yards of dredged material (the bottom layer of Composite Area A and all of the Composite Area B material) based on the finding that the “United States Army Corps of Engineers Environmental Residual Effects Database values showed that none of these constituents were close to the chronic toxicity thresholds for long term bioaccumulation potential.”

The Tentative WDRs provide:

- 1. The Discharge Requirements specified above are valid only for dredging of a maximum of 27,000 cubic yards of sediment and soil, with disposal of up to 21,800 cubic yards of dredged material at the LA-2 ocean disposal site and disposal of up to 5,200 cubic yards of dredged material at Berths 243-245 Confined Disposal Facility.*

(Tentative Waste Discharge Requirements dated Oct. 9, 2014, Attached as Exhibit 2.)

The Final WDRs changed. The Order contains the following staff recommendation, which recites an unwritten Regional Board policy regarding reuse of dredged material, rejects material previously deemed suitable for ocean disposal on grounds that it “barely met” the technical criteria, and inappropriately invokes a sediment quality “guideline” used by the Regional Board to regulate discharges into impaired water bodies within State jurisdictional boundaries.

*Since the long-term goal of the Los Angeles Regional Board is 100 % beneficial reuse of dredged material, ocean disposal is not recommended since it does not constitute beneficial reuse. In addition, although 21,800 cubic yards of dredged material was deemed suitable for ocean disposal, it barely met the technical criteria for approval given the sediment contaminant levels observed during testing. Furthermore, the material to be dredged exceeds sediment quality guidelines (Effects Range-Low, or ERL, thresholds) used as numeric targets to limit adverse effects to aquatic life established by the Los Angeles Regional Board for the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Water Toxic Pollutant Total Maximum Daily Loads. It would be inconsistent to allow such material to be disposed of at the ocean disposal site. Therefore, staff recommends disposal of the entire 27,000 cubic yards of dredged material at the POLA Confined Disposal Facility located at Berths 243-245.*

(Order R4-2014-0228, Exhibit 1 at p. 3.)

Based on the staff recommendation, the Regional Board imposed a ban on ocean disposal, ordering that all 27,000 cubic yards of dredged material be disposed in the Confined Disposal Facility, a structure designed, permitted and built for the specific purpose of containing material that is unsuitable for ocean disposal. The Final WDRs provide:

- 1. The Discharge Requirements specified above are valid only for dredging of a maximum of 27,000 cubic yards of sediment and soil, with disposal at the POLA Berths 243-245 Confined Disposal Facility.*

(Order R4-2014-0228, Exhibit 1 at p. 6.)

Petitioner requests that the State Board amend the Order to allow for ocean disposal of up to 21,800 cubic yards of dredged material at the LA-2 ocean disposal site as approved by the U.S. Army Corps of Engineers, U.S.EPA and Los Angeles Region Contaminated Sediments Task Force and as was set forth in the Tentative WDRs.

**3. The Date On Which The Regional Board Acted Or Failed To Act.**

The Regional Board acted on December 4, 2014 when it adopted Order R4-2014-0228.

**4. Full And Complete Statement Of The Reasons The Action Or Inaction Was Inappropriate Or Improper.**

The Regional Board's action was improper because ocean dumping at the LA-2 Site is exclusively under federal jurisdiction. Permitting authority for LA-2 Site is vested in the U.S. Army Corps of Engineers with concurrence from, and using criteria established by, the U.S. Environmental Protection Agency. (Marine Protection, Research, and Sanctuaries Act, 33 U.S.C. § 1401 *et seq.* ("MPRSA").) The Regional Board acknowledged that the subject portion of dredged material met criteria established by the U.S.EPA but nonetheless unlawfully asserted its own policy requiring 100% beneficial use of dredged material, supported in part by the imposition of its own more stringent criteria, specifically, the Effects Range-Low thresholds it used as a guideline in setting the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Water Toxic Pollutant Total Maximum Daily Loads (which, unlike the LA-2 Site, are impaired water bodies).

The MPRSA preserves the right of the State to adopt more stringent requirements with respect to ocean dumping but said rights are limited to State waters. (33 U.S.C. 1416(d)(1).) It was improper for the Regional Board to either: a) ban ocean dumping at the LA-2 Site or b) impose more stringent criteria for disposal at the LA-2 Site because it lies beyond the three mile limit of the

territorial seas. The LA-2 Site is, from a federal perspective, outside of State waters and beyond the jurisdiction of the Clean Water Act and its State certification provisions. Moreover, the Regional Board's policy and standards are in conflict with federal permitting authority. As such, the Regional Board's policy and standards are preempted.

**5. The Manner In Which The Petitioner Is Aggrieved.**

**a. Background: The Yusen Terminal Improvements Project**

The project to which the Order applies consists of improvements to the Yusen Terminals Inc. ("YTI") facility on Terminal Island in the Port of Los Angeles. The improvements will allow YTI to realize the benefits of the Port's Main Channel Deepening Project, a 10-year, \$370 million joint federal-local project that deepened the main navigational channel and turning basins to allow the Port to accommodate bigger, more modern vessels from around the world. Although the main navigation channel was dredged to a depth of 53 feet, that depth does not reach the YTI berths.

Physical improvements at the YTI Terminal include dredging at Berths 214-216 and Berths 217-220, installing sheet piles at Berths 214-216, adding and replacing/extending wharf gantry cranes, extending the 100-foot gauge crane rail along the wharf deck to Berths 217-220, improving/repairing backlands across the entire site, and adding a new operational rail track adjacent to the existing on-dock rail yard.

Dredging will increase the depth at Berths 217-220 from 45 feet to 47 feet and at Berths 214-216 from 45 feet to 53 feet. Approximately 6,000 cubic yards of sediment will be dredged from Berths 217 -220 and approximately 21,000 cubic yards from Berths 214-216.

**b. A Regional Board Ban On Ocean Dumping Wastes The Limited Capacity Of The Confined Disposal Facility To Make Beneficial Reuse Of Material That Is Truly Unsuitable For Ocean Disposal.**

The Harbor Department's Confined Disposal Facility ("CDF") at Berths 243-245 was constructed as part of the Main Channel Deepening Project for the specific purpose of accepting dredged material that is truly unsuitable for ocean disposal. It consists of a rock dike with a sand liner to prevent the escape of sediment and contaminants into adjacent harbor waters. It has limited capacity and is the only facility of its kind in the Port of Los Angeles. The permitting process for construction of the CDF took more than four years.

The Harbor Department will continue to generate dredged material that is unsuitable for ocean disposal as a result of maintenance dredging, as a result of other terminal improvement projects which, like the YTI project, will allow the benefits of the Main Channel Deepening to be realized, and as the result of environmental remediation projects such as the dredging that occurred around Kaiser Point and San Pedro Boat Works.

Using the CDF to dispose of material that is otherwise suitable for ocean disposal wastes a valuable asset. In the absence of CDF capacity, contaminated dredge material will have to be offloaded to shore, dried and transported by truck to a landfill, a far more expensive and more environmentally harmful alternative.

Maintenance, development and remediation of the Los Angeles Harbor will be hindered if the limited capacity of the CDF is wasted by using it as a receptacle for material that has been deemed suitable for ocean disposal.

**6. The Specific Action By The State Or Regional Board Which Petitioner Requests.**

Petitioner requests that the State Board amend, or direct the Regional Board to amend, Order R4-2014-0228 to allow for ocean disposal of up to 21,800 cubic yards of dredged material at the LA-2 Ocean Disposal Site as set forth in the Tentative WDRs, Exhibit 2.

**7. Statement Of Points and Authorities In Support Of Legal Issues Raised In The Petition Including Citations To Documents Or The Transcript Of The Regional Board Hearing If It Is Available.**

**a. The MPRSA (a.k.a. “Ocean Dumping Act”) Grants Permitting Authority To The U.S. Army Corps Of Engineers Using U.S. Environmental Protection Agency Criteria.**

In 1972, Congress enacted the Marine Protection, Research, and Sanctuaries Act (“MPRSA,” also known as the “Ocean Dumping Act”) to prohibit the dumping of material into the ocean that would unreasonably degrade or endanger human health or the marine environment. (33 U.S.C. § 1401(b).) The MPRSA gives the U.S. Environmental Protection Agency responsibility for regulating the dumping of all materials except dredged material. (33 U.S.C. §1412(a).) In the case of dredged material, the decision to issue a permit is made by the U.S. Army Corps of Engineers using criteria established by the U.S. EPA and subject to the U.S. EPA’s concurrence. (33 U.S.C. §1413.) The U.S. EPA maintains responsibility for designating and creating management plans for ocean dumping sites for all types of materials. (33 U.S.C. §1412(c)(3).)

As acknowledged by the Order, 21,800 cubic yards of material was approved for ocean disposal by the Army Corps, U.S. EPA and by the Los Angeles Region Contaminated Sediments Task Force. (Order R4-2014-0228, Exhibit 1 at p. 3, ¶¶ 5, 6, see also, Southern California Dredged

Material Management Team (SC-DMMT) Meeting Minutes dated January 22, 2014, attached as Exhibit 3.)

**b. The MPRSA’s “Savings Clause” Preserves The Right Of The State To Regulate Ocean Dumping, But Only In State Waters.**

The MPRSA allows the State to make and enforce its own regulations with respect to the ocean dumping of dredged material within the jurisdiction of the State:

*(1) State rights preserved. Except as expressly provided in this subsection, nothing in this title [33 USCS §§ 1411 et seq.] shall preclude or deny the right of any State to adopt or enforce any requirements respecting dumping of materials into ocean waters within the jurisdiction of the State.*

(33 U.S.C. 1416(d)(1).)

The LA-2 Disposal site lies approximately 6 miles south of the Point Fermin lighthouse, in the body of water known as the San Pedro Channel. (Order R4-2014-0228, Exhibit 1 at p. 11 Figure 3, see also, U.S. EPA, *Site Management & Monitoring Plan for Three Southern California Ocean Dredged Material Disposal Sites: LA-2, LA-3, and LA-5*, April 2009, Attached as Exhibit 4.)

Under the California Constitution and statutes, the LA-2 Site is in State waters. But under federal law, the LA-2 Site is not. Since the Regional Board’s policies and criteria are conflict with the permitting authority of the U.S. Army Corps and U.S.EPA, federal law is used to define the State’s boundaries. Under federal law, the LA-2 Disposal Site is not “within the jurisdiction of the State.”

**c. Under Federal Law, The LA-2 Site Is Beyond California’s Territorial Boundary.**

Under state law, California's territorial boundaries extend three nautical miles beyond the outermost islands, reefs, and rocks, and include all waters between those islands and the coast. (Cal. Const., art. III, § 2; Cal. Gov. Code, §§ 170, 171; *People v. Weeren* (1980) 26 Cal.3d 654, 661.)

Under this definition, the San Pedro Channel and Santa Barbara Channel are within the jurisdiction of the State.

Federal law views California's territorial boundaries more narrowly. It similarly defines the territory as extending three nautical miles from the coast, but includes only a three-mile-wide band around any islands lying off the coast. (43 U.S.C. § 1301(b), 1312.) Federal law thus excludes the waters between the islands and the coast, such as the central portions of the San Pedro and Santa Barbara Channels. (*United States v. California* (1965) 381 U.S. 139, 169-171, supplemental decree issued December 15, 2014, 2014 U.S. Lexis 8436.)

The federal law boundaries apply when the extent of a state's territorial jurisdiction is relevant to the operation of a federal law. (*Tidewater Marine Western Inc. v. Bradshaw* (1996) 14 Cal.4th 557, 565 (citing, *People v. Weeren*, 26 Cal. 3d at 660).) In this case, the extent of California's territorial jurisdiction is relevant to operation of the MPRSA and its limitation on the State's ability to regulate ocean dumping, hence the federal boundaries apply. Under federal law, the LA-2 Site is outside of California's territorial jurisdiction.

**d. The Regional Board's Policy And Standards In Regard To The LA-2 Site Are Preempted By Federal Authority.**

The United States Supreme Court has long held that a State may regulate the conduct of its citizens upon the high seas where no conflict with federal law is presented. (*Skiriotes v. Florida* (1941) 313 U.S. 69, 77 (“If the United States may control the conduct of its citizens upon the high seas, we see no reason why the State of Florida may not likewise govern the conduct of its citizens upon the high seas with respect to matters in which the State has a legitimate interest and where there is no conflict with acts of Congress.”); *People v. Weeren*, 26 Cal.3d at 667 (state laws at issue

present no conflict with federal swordfish policies because no federal rules have been promulgated).)

More recently, the California Supreme Court approved the jurisdictional reach of California's Industrial Welfare Commission to regulate overtime pay for the crew of a vessel serving oil platforms in the Santa Barbara Channel. As a threshold matter, the Court reviewed the differing views of California's territorial boundaries, noting that "the federal law boundaries would have precedence only if the operation of federal law were at issue, as for example if federal law conflicted with state law." (*Tidewater Marine v. Bradshaw*, 14 Cal.4th at 565 (citing, *Weeren*, 26 Cal.3d at 670).) In accord with *Skiriotes* and *Weeren*, the Court held that in the absence a conflict, California can govern employment of its residents on the high seas regardless of its boundaries.

The *Tidewater* Court then proceeded to find that the federal Fair Labor Standards Act of 1938 ("FLSA," 29 U.S.C. § 201 *et seq.*) did not conflict with or preempt California's attempt to regulate the overtime pay of certain maritime employees. First, because the FLSA has a "savings clause," that provides: "No provision of this chapter or of any order thereunder shall excuse noncompliance with any . . . State law or municipal ordinance establishing . . . a maximum workweek lower than the maximum workweek established under this chapter . . . ." And second, because no provision of the FLSA actually conflicts with California law. (*Tidewater Marine*, 14 Cal.4th at 567-568 (quoting 29 U.S.C. § 218(a)).)

In this case, the MPRSA does conflict with and does preempt the Regional Board's attempt to regulate disposal of dredged material at the LA-2 Site. Unlike the FLSA, the savings clause of the MPRSA explicitly limits the application of state law to "waters within the jurisdiction of the

State.” (33 U.S.C. 1416(d)(1).) Outside of State waters, the MPRSA’s permitting authority is exclusively federal as intended by Congress.<sup>1</sup>

Preemption is found whenever Congress expresses a clear intent to preempt state law. (*Jones v. Rath Packing Co.* (1977) 430 U.S. 519.)<sup>2</sup> In enacting the MPRSA, Congress expressed such intent. As originally enacted, Section 106(d) of the MPRSA provided:

After the effective date of this subchapter, no State shall adopt or enforce any rule or regulation relating to any activity regulated by this title. Any State may, however, propose to the Administrator criteria relating to the dumping of materials into ocean waters within its jurisdiction, or into other ocean waters to the extent that such dumping may affect waters within the jurisdiction of such State, . . .

(P.L. 92-532 – Oct. 13, 1972; see also, *Save Our Sound Fisheries Assoc. v. Callaway* (D.R.I. 1974) 387 F.Supp. 292, 307 (state law inapplicable to activity regulated by MPRSA).) Although Section 106 was revised in 1992 to allow States to superimpose stricter standards within State waters, Congress’ intent to regulate the oceans was not diminished.<sup>3</sup> The 1992 revision simply made the MPRSA consistent with the jurisdictional limits of the Clean Water Act.<sup>4</sup>

Under the Clean Water Act, each State is given concurrent jurisdiction and is free to enforce its own water quality laws so long as its effluent limitations are not "less stringent" than those set out in the Clean Water Act. (33 U.S.C. § 1370.) The geographic extent of this concurrent

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<sup>1</sup> Congress declared its intent to regulate ocean dumping in Section 101 of the MPRSA: “The Congress declares that it is the policy of the United States to regulate the dumping of all types of materials into ocean waters and to prevent or strictly limit the dumping into ocean waters of any material which would adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities.” (33 U.S.C. § 1401.)

<sup>2</sup> Pre-emption is not limited to statutes. A federal agency acting within the scope of its congressionally delegated authority may preempt state regulation. (*Fidelity Federal Savings & Loan Assn. v. De La Cuesta* (1982) 458 U.S. 141.)

<sup>3</sup> Arguably, States now have less voice with respect to ocean dumping beyond their borders as the mechanism for proposing alternate criteria to the U.S. EPA was removed.

<sup>4</sup> The Federal Water Pollution Control Act Amendments of 1972, 86 Stat. 816, codified as amended at 33 U.S.C.S. § 1251 *et seq.*, are referred to as the Clean Water Act.

jurisdiction is found in the definition of the term “discharge of a pollutant,” which is defined as “any addition of any pollutant to navigable waters from any point source” and “any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.” (33 U.S.C. § 1362(12).) For the discharge of dredged material from a vessel, jurisdiction under the Clean Water Act is limited to navigable waters, which the Act defines as “waters of the United States including the territorial seas.” (33 U.S.C. § 1362(7).) “Territorial seas” are “the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.” (33 U.S.C. § 1362(8).)

The LA-2 site, which lies beyond the three mile limit, is outside the jurisdiction of the Clean Water Act and outside of the concurrent State jurisdiction granted by the Act. As such, the discharge of dredged material at the LA-2 Site does not require State certification under Section 401. (*Natural Resources Defense Council, Inc. v. U.S. Environmental Protection Agency* (9th Cir. 1988) 863 F.2d 1420, 1434-1435 (EPA permit related to discharges associated with offshore drilling covers discharges beyond three mile belt of territorial seas so the permit does not require certification by State of Florida ) see also, *Pacific Legal Foundation v. Quarles* (C.D. Cal. 1977) 440 F.Supp. 316, 318-319, *aff'd* 614 F.2d 225 *cert. denied* 449 U.S. 825 (ocean pollution is regulated in part by Clean Water Act and in part by MPRSA and the general demarcation line between the two Acts' jurisdictions, with the exception of pipes or outfalls, is the three-mile limit of the territorial seas).)

Preemption also occurs when state law conflicts with federal law. A conflict exists when compliance with both federal and state regulations is a physical impossibility (*Florida Lime & Avocado Growers, Inc. v. Paul* (1963) 373 U.S. 132, 142-143), or where the state law “stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.”

(*Hines v. Davidowitz* (1941) 312 U.S. 52, 67.) In this case, although federal law allows, and a federal agency permitted ocean disposal of 21,800 cubic yards of dredged material, the Regional Board adopted complete ban on ocean disposal by requiring “100% beneficial reuse of dredged material.” Compliance with the federal permit and the Regional Board’s policy is a physical impossibility.

The Regional Board’s action, whether viewed as a wholesale ban or as the imposition of alternate criteria for ocean disposal, frustrates the purpose of the MPRSA. The Act authorizes the Secretary of the Army, not the Regional Board, to determine, subject to concurrence by the Administrator of the U.S. EPA, whether dumping will “unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities.” (33 U.S.C. § 1413(a).) The Act instructs the Secretary of the Army, not the Regional Board, to make an independent determination of need for dumping and to consider other methods of disposal and appropriate locations. (33 U.S.C. § 1413(b).)

The Regional Board refused to accept the Secretary of the Army’s judgment regarding the need for ocean dumping and the suitability of the material and unlawfully asserted its own policy and standards which operate as a complete and total ban on ocean dumping. The Supremacy Clause of the United States Constitution dictates that the federal judgment must prevail. (*Ray v. Atlantic Richfield Co.* (1978) 435 U.S. 151, 163-164 (with respect to design characteristics, statutory pattern shows Congress entrusted Secretary, to the exclusion of state law, to determine which oil tankers are sufficiently safe to proceed in the navigable waters of the United States).)

With respect to disposal at the LA-2 Site, the WDRs issued by the Regional Board should conform with the federal permit.

**8. Statement That Petition Has Been Sent To The Appropriate Regional Board**

This petition has been transmitted by email to the Los Angeles Regional Board at *losangeles@waterboards.ca.gov*, with copies to the Executive Director at *sunger@waterboards.ca.gov* and staff counsel at *nicole.kuenzi@waterboards.ca.gov*.

**9. Statement That The Substantive Issues Or Objections Raised In The Petition Were Raised Before The Regional Board, Or An Explanation Of Why The Petitioner Was Not Required Or Was Unable TO Raise These Substantive Issues Or Objections Before the Regional Board.**

As noted section 2 above, the Tentative WDRs issued by the Regional Board allowed ocean disposal of 21,800 cubic yards of dredged material in conformance with the prior approval of the U.S. Army Corps, the U.S. EPA and the Contaminated Sediments Task Force. The City of Los Angeles Harbor Department did not learn of the change until the day before, and was not afforded the opportunity to view the Final Order until it was presented at the hearing on December 4, 2014. The Harbor Department argued for conformity in a letter addressed to the Executive Director dated December 2, 2014 and attached as Exhibit 5. The Harbor Department argued against the use of alternate ocean dumping criteria (Effects Range –Low thresholds) at the hearing.

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Because the Tentative WDR was changed at the last minute, the Harbor Department was unable to engage legal counsel and was unprepared to make the jurisdictional arguments presented herein. Nonetheless, an objection that an administrative agency acted without or in excess of its jurisdiction may be made at any time. (*Troy Gold Industries, Ltd. v. Occupational Safety & Health Appeals Bd.* (1986) 187 Cal.App.3d 379, 385 (subject matter jurisdiction cannot be conferred by consent, waiver, or estoppel so issue may be raised at any time).)

Respectfully Submitted,

January 5, 2015

MICHAEL N. FEUER, City Attorney

Janna P. Sidley, General Counsel

By: *Kenneth Mattfeld*

Kenneth F. Mattfeld, Deputy

Attorneys for City of Los Angeles Harbor Dept.

**Exhibit 1**



EDMUND G. BROWN JR.  
GOVERNOR

MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

## Los Angeles Regional Water Quality Control Board

December 10, 2014

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

### WASTE DISCHARGE REQUIREMENTS BERTHS 212-224 REDEVELOPMENT (FILE NO. 14-097)

Dear Mr. Gioiello:

Reference is made to our letter of October 9, 2014, which transmitted copies of tentative waste discharge requirements (WDRs) and a receiving water monitoring program for dredging and disposal of dredged material from the Port of Los Angeles Berths 212-224 Redevelopment project within Los Angeles Harbor in San Pedro, Los Angeles County.

In accordance with the California Water Code, this Board, at a public meeting held on December 4, 2014, reviewed the tentative requirements, considered all factors in the case and adopted Order No. R4-2014-0228 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. 10115. 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.

A handwritten signature in black ink, appearing to read "J. Michael Lyons".

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 Wildlife (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  
Edward Han, Port of Los Angeles  
Kathryn Curtis, Port of Los Angeles

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

**ORDER NO. R4-2014-0228**

**WASTE DISCHARGE REQUIREMENTS  
FOR  
PORT OF LOS ANGELES  
(BERTHS 212-224 REDEVELOPMENT)  
(FILE NO. 14-097)**

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 terminal improvements and maintenance dredging operations at Berths 212-224 (Yusen Terminals, Inc.) at Terminal Island in Los Angeles Harbor, Los Angeles County.
2. The project area is located along the East Basin Channel, between the Evergreen Container Terminal and the SA Recycling scrap metal facility, to the north of Vincent Thomas Bridge in Los Angeles Harbor (Figure 1). POLA proposes terminal improvements at Berths 212-224 consisting of dredging, wharf and backland improvements, expansion of the Terminal Island Container Transfer Facility (TICTF) on-dock rail track, and the installation of new cranes and modifications of existing cranes.

Wharf improvements include the installation of sheet piles from Berths 217-220 over a linear distance of approximately 1200 feet, and the installation of sheet and king piles from Berths 214-216 over a linear distance of approximately 1400 feet. Wharf improvements also include crane rail extension at Berths 217-220 over a linear distance of approximately 1500 feet. This will allow existing and new 100-foot-gauge gantry cranes to service ships along the berth. Backland improvements consist of pavement repair and concrete runway installation over a linear distance of approximately 5600 feet. TICTF expansion consists of constructing one loading rack over a linear distance of approximately 3200 feet and backland reconstruction (relocation/removal/modification of existing light poles, utilities and fencing) to accommodate the track. The proposed project also includes the installation of four new 100-foot-gauge gantry cranes, and the modification (raising the cranes and extending the boom to accommodate larger ships) of six existing gantry cranes.

3. Dredging will occur at Berths 217-220 to increase the existing depth from -45 feet mean lower low water (MLLW) to -47 feet MLLW (plus 2 feet of allowable

November 18, 2014

overdredging), and at Berths 214-216 to increase the existing depth from -45 feet MLLW to -53 feet MLLW (plus 2 feet of allowable overdredging). Approximately 27,000 cubic yards of sediment will be dredged, with approximately 6,000 cubic yards originating from Berths 217-220 and approximately 21,000 cubic yards originating from Berths 214-216. Approximately 5,200 cubic yards of dredged material is proposed by POLA for disposal at the POLA Confined Disposal Facility (CDF) located at Berths 243-245 (Figure 1). The CDF is bermed and storage cell areas are designed in a manner to contain the dredged material on the site and prevent escape of sediment and contaminants into adjacent harbor waters. Approximately 21,800 cubic yards of dredged material is proposed by POLA for disposal at the LA-2 Ocean Dredged Material Disposal Site.

4. A sediment characterization study was conducted for Berths 212-224 in June 2013. Core samples were collected at five locations within the area of Berths 214-216 and combined into a single composite (Composite A) for grain size determinations, toxicity testing, bioaccumulation testing and chemical analyses (figure 2). Core samples also were collected at five locations within the area of Berths 217-220 and combined into a single composite (Composite B) for grain size determinations, toxicity testing, bioaccumulation testing and chemical analyses (figure 2).

An additional sub-composite (Composite A – Bottom) was created in November 2013 from the frozen archived core samples from the Berths 214-216 area to create a composite representing the heavy clay sediment found at the bottom of most of the cores collected in this area. Chemical analyses were conducted on this sub-composite material.

5. The sediment characterization results showed that the material to be dredged from Berths 214-216 and 217-220 is predominantly silt-clay (97.1 % silt-clay for Composite A from Berths 214-216 and 80.5% silt-clay for Composite B from Berths 217-220). This material is not suitable for beneficial reuse for beach replenishment.

The initial sediment test results indicated that Composite Area A material was unsuitable for ocean disposal at LA-2, due to significant acute toxicity observed. However, visual observation of the core samples suggested that there was a significant difference in the character of the material present in the top 2-foot layer of the core and the lower sections of the cores collected in Composite Area A. Consequently, the bottom portion of Composite Area A was retested for PAHs, PCB congeners, chlorinated pesticides, metals and pyrethroids. Despite the presence of low levels of copper, arsenic, and nickel, there is a low potential for bioaccumulation, and the bottom layer of Composite Area A is deemed to be composed of native clay material and meets the suitability requirements for ocean disposal at LA-2. The remaining unconsolidated material from Composite Area A (the top 2-foot layer) is not

suitable for ocean disposal, but would be suitable for disposal in the Berth 243-245 Confined Disposal Facility.

The Composite Area B material meets the suitability requirements for ocean disposal at LA-2. Although some metals (arsenic, copper and mercury) exceeded the Effects Range-Low thresholds for which toxicity possibly could occur, none of the metals exceeded the Effects Range-Median thresholds for which toxicity would be likely to occur. Acute toxicity was not observed for the Composite Area B material, indicating that these concentrations of metals were not toxic to aquatic organisms. Although some metals (including chromium, copper and lead), some PAHs (including benzo(a) pyrene, benzo(b)fluoranthene, chrysene, fluoroanthene and pyrene) and some PCB congeners (including 52, 138 and 158) showed elevated tissue concentrations compared to reference tissue values, comparison to the United States Army Corps of Engineers Environmental Residual Effects Database values showed that none of these constituents were close to the chronic toxicity thresholds for long term bioaccumulation potential.

Since the long-term goal of the Los Angeles Regional Board is 100 % beneficial reuse of dredged material, ocean disposal is not recommended since it does not constitute beneficial reuse. In addition, although 21,800 cubic yards of dredged material was deemed suitable for ocean disposal, it barely met the technical criteria for approval given the sediment contaminant levels observed during testing. Furthermore, the material to be dredged exceeds sediment quality guidelines (Effects Range-Low, or ERL, thresholds) used as numeric targets to limit adverse effects to aquatic life established by the Los Angeles Regional Board for the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Water Toxic Pollutant Total Maximum Daily Loads. It would be inconsistent to allow such material to be disposed of at the ocean disposal site. Therefore, staff recommends disposal of the entire 27,000 cubic yards of dredged material at the POLA Confined Disposal Facility located at Berths 243-245.

6. The United States Corps of Engineers (COE) has granted conditional approval for permit application SPL-2013-00113-TS for the Berths 212-224 dredging project. A final permit is expected to be issued after the COE receives the final Waste Discharge Requirements adopted by the Los Angeles Regional Water Quality Control Board.
7. The Port of Los Angeles and the COE prepared a Draft Environmental Impact Statement/Report (EIS/EIR) for the Berths 212-224 YTI Container Terminal Improvements Project. The Board of Harbor Commissioners certified the EIS/EIR on October 16, 2014.

Table 1. Sediment Characteristics (2013) – Berths 212-224 Project.

Parameter	Berths 214-216 (Composite A)	Berths 217-220 (Composite B)	Berths 214-216 (Composite A – Bottom)	Sediment screening thresholds
Grain size: Sand/Gravel	2.9 %	19.5 %	Not analyzed	
Grain size: Silt and Clay	97.1 %	80.5 %	Not analyzed	
Silver	0.183 ppm	0.219 ppm	0.112 (estimated)	ERL = 1 ppm ERM = 3.7 ppm
Arsenic	10.4 ppm	8.77 ppm	8.44 ppm	ERL = 8.2 ppm ERM = 70 ppm
Cadmium	0.499 ppm	0.471 ppm	0.423 ppm	ERL = 1.2 ppm ERM = 9.6 ppm
Chromium	35.2 ppm	32.9 ppm	33.7 ppm	ERL = 81 ppm ERM = 370 ppm
Copper	88.8 ppm	60.1 ppm	54.5 ppm	ERL = 8.2 ppm ERM = 70 ppm
Mercury	0.217 ppm	0.171 ppm	0.110 ppm	ERL = 0.15 ppm ERM = 0.71 ppm
Nickel	26.8 ppm	17.3 ppm	28.5 ppm	ERL = 20.9 ppm ERM = 51.6 ppm
Lead	27.3 ppm	22.4 ppm	11.1 ppm	ERL = 46.7 ppm ERM = 218 ppm
Selenium	0.237 ppm	0.415 ppm	0.339 ppm	Not available
Zinc	112 ppm	112 ppm	85.8 ppm	ERL = 150 ppm ERM = 410 ppm
Total DDT	3.1 ppb	15.1 ppb	< 1.4 ppb	ERL = 1.58 ppb ERM = 46.1 ppb
Total PCB	38.44 ppb	0.86 ppb	<0.68 ppb	ERL = 22.7 ppb ERM = 180 ppb
Total PAH	749 ppb	657 ppb	512 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

8. 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.
9. 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).
10. 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.
11. 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 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.
  - 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 27,000 cubic yards of sediment and soil, with disposal at the POLA Berths 243-245 Confined 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.
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.

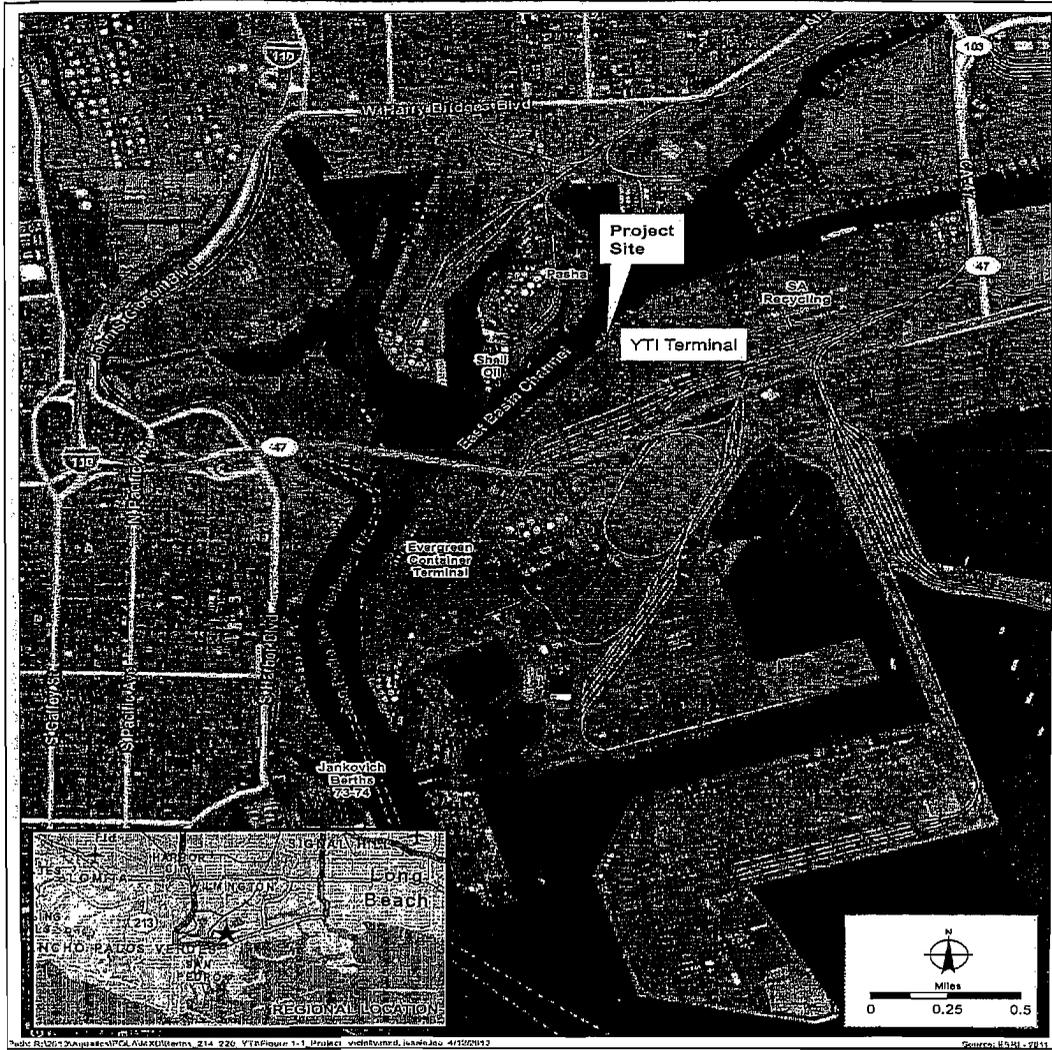
10. This Order fulfills the requirements for a Clean Water Act Section 401 Water Quality Certification for the proposed project. Pursuant to section 3860 of title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:
  - a. this certification 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, 2017.

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 December 4, 2014.



SAMUEL UNGER, P.E.  
Executive Officer



**amec** Project Vicinity  
Berths 212-224 [YTI] Container Terminal Improvements Project  
Port of Los Angeles

FIGURE  
1-1

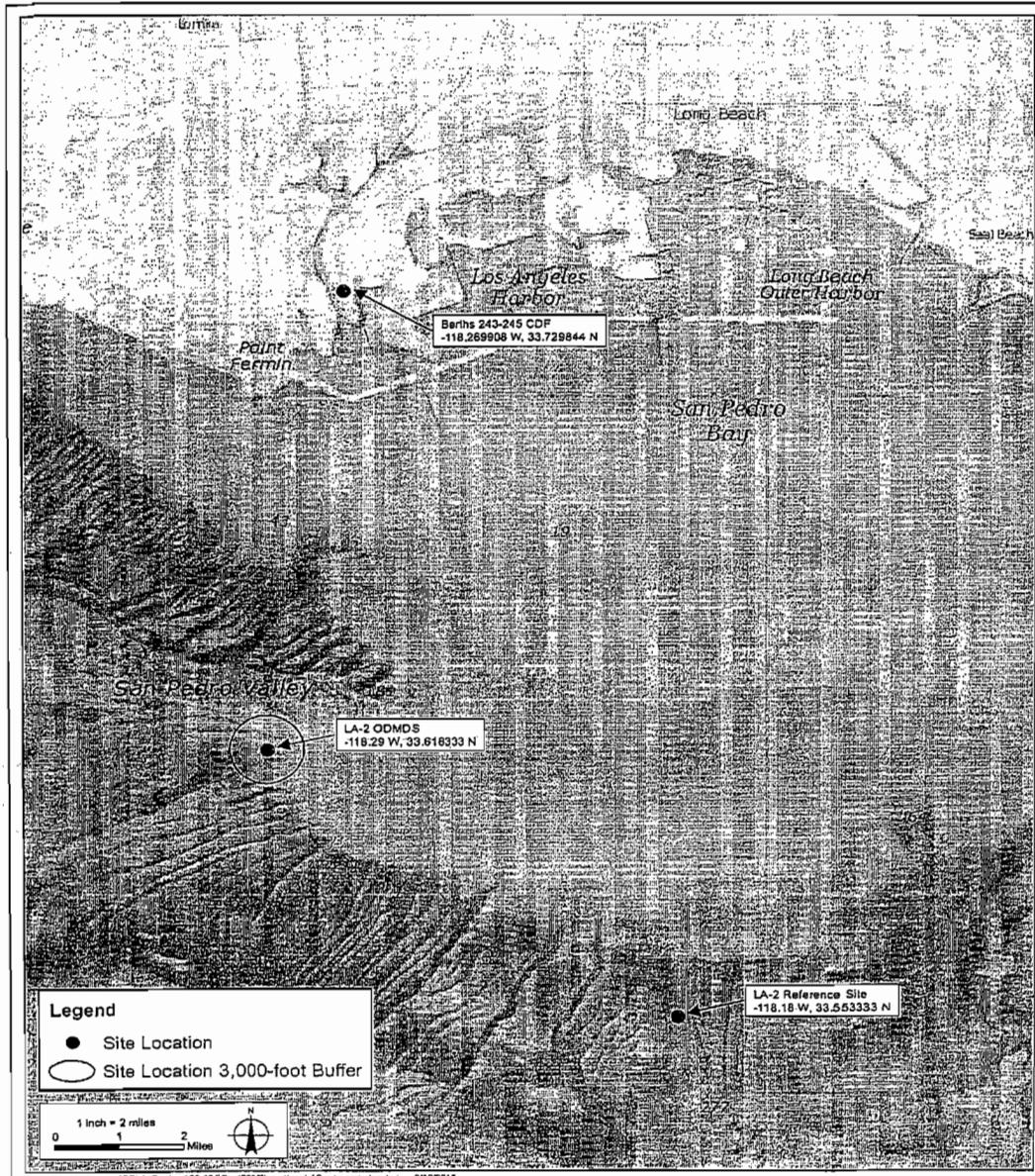
Figure 1.  
Location map for Berths 212-224 Redevelopment Project in Los Angeles Harbor.



**amec** **Project Location**  
Berths 212-224 [YTI] Container Terminal Improvements Project  
Port of Los Angeles

**FIGURE**  
**1-2**

Figure 2.  
Dredging footprint for Berths 212-224 Redevelopment Project.



Point: R:\sd11\Map\Aerial\POLA\_Berths\_163-184\Sept2012\Location\_LA2\_ese.mxd, Ibeats, Inc. 9/10/2012  
Aerial Source: Esri, Imagery, USDA, USGS, AEX, GeoEye, Geomapping, AeroGRID, IGN, IGP, and the GIS User Community

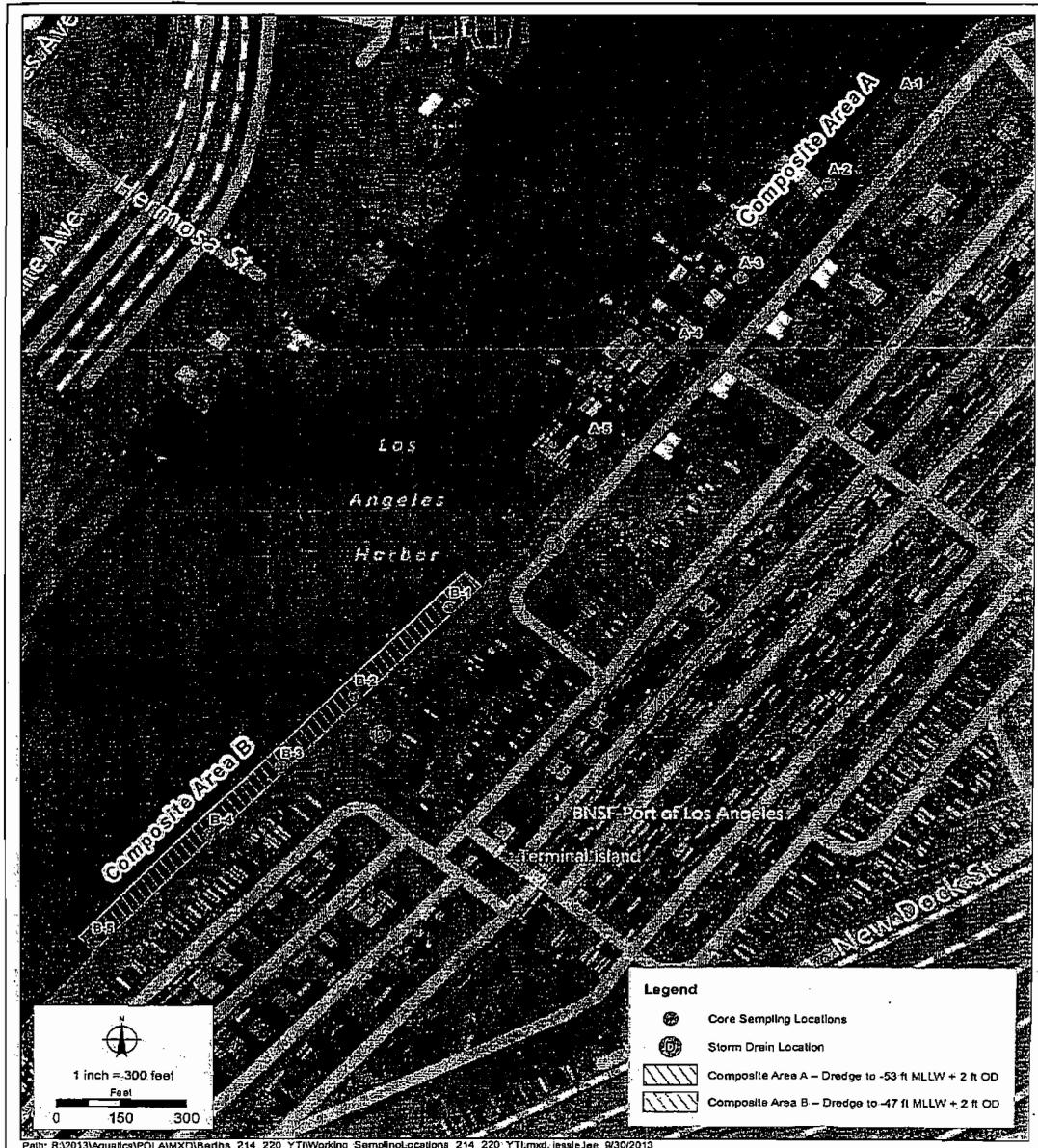
Location of LA-2 Ocean Dredged Material Disposal  
and Reference Sediment Collection Sites

FIGURE

1-3



Figure 3.  
Location of Berths 243-245 Confined Disposal Facility and LA-2 Ocean Disposal Site.



amec **Core Sampling Locations** Berths 212-224 [YTI] Container Terminal Improvements Project Port of Los Angeles **FIGURE 2-1**

Figure 4.  
Location of core sampling locations for sediment characterization study.

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

MONITORING AND REPORTING PROGRAM NO. 10115  
FOR  
PORT OF LOS ANGELES  
(BERTHS 212-224 REDEVELOPMENT)  
(FILE NO. 14-097)

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:

<u>Station</u>	<u>Description</u>
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.

September 29, 2014

The following shall constitute the receiving water monitoring program:

Water Column

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

<sup>1</sup>Measurements shall be taken throughout the water column (at a minimum, at 2-meter increments).

<sup>2</sup>During the first two weeks of dredging, stations shall be sampled two times per week.

<sup>3</sup>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.

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 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.

## 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.

Monitoring and Reporting Program No. 10115  
Port of Los Angeles  
Berths 212-224 Redevelopment

Order No: R4-2014-0228

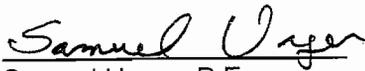
Executed on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,  
at \_\_\_\_\_.

\_\_\_\_\_  
(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: December 4, 2014

**Exhibit 2**



EDMUND G. BROWN JR.  
GOVERNOR



MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

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## Los Angeles Regional Water Quality Control Board

October 9, 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 BERTHS 212-224 REVELOPMENT (FILE NO. 14-097)

Dear Mr. Gioiello:

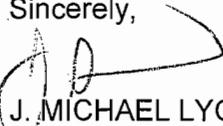
We have completed our review of your application to this Board for waste discharge requirements for your proposed discharge of wastes. Enclosed are copies of tentative waste discharge requirements (WDRs) and a receiving water monitoring program for dredging and disposal of dredged material from the Berths 212-224 Redevelopment 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 December 4, 2014, 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 **November 14, 2014**. 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

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CHARLES STRINGER, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | [www.waterboards.ca.gov/losangeles](http://www.waterboards.ca.gov/losangeles)

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)  
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)  
Kirsten James, Heal the Bay  
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. R4-2014-XXXX

WASTE DISCHARGE REQUIREMENTS  
FOR  
PORT OF LOS ANGELES  
(BERTHS 212-224 REDEVELOPMENT)  
(FILE NO. 14-097)

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 terminal improvements and maintenance dredging operations at Berths 212-224 (Yusen Terminals, Inc.) at Terminal Island in Los Angeles Harbor, Los Angeles County.
2. The project area is located along the East Basin Channel, between the Evergreen Container Terminal and the SA Recycling scrap metal facility, to the north of Vincent Thomas Bridge in Los Angeles Harbor (Figure 1). POLA proposes terminal improvements at Berths 212-224 consisting of dredging, wharf and backland improvements, expansion of the Terminal Island Container Transfer Facility (TICTF) on-dock rail track, and the installation of new cranes and modifications of existing cranes.

Wharf improvements include the installation of sheet piles from Berths 217-220 over a linear distance of approximately 1200 feet, and the installation of sheet and king piles from Berths 214-216 over a linear distance of approximately 1400 feet. Wharf improvements also include crane rail extension at Berths 217-220 over a linear distance of approximately 1500 feet. This will allow existing and new 100-foot-gauge gantry cranes to service ships along the berth. Backland improvements consist of pavement repair and concrete runway installation over a linear distance of approximately 5600 feet. TICTF expansion consists of constructing one loading rack over a linear distance of approximately 3200 feet and backland reconstruction (relocation/removal/modification of existing light poles, utilities and fencing) to accommodate the track. The proposed project also includes the installation of four new 100-foot-gauge gantry cranes, and the modification (raising the cranes and extending the boom to accommodate larger ships) of six existing gantry cranes.

3. Dredging will occur at Berths 217-220 to increase the existing depth from -45 feet mean lower low water (MLLW) to -47 feet MLLW (plus 2 feet of allowable

September 29, 2014

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overdredging), and at Berths 214-216 to increase the existing depth from -45 feet MLLW to -53 feet MLLW (plus 2 feet of allowable overdredging). Approximately 27,000 cubic yards of sediment will be dredged, with approximately 6,000 cubic yards originating from Berths 217-220 and approximately 21,000 cubic yards originating from Berths 214-216. Approximately 5,200 cubic yards of dredged material will be disposed of at the POLA Confined Disposal Facility (CDF) located at Berths 243-245 (Figure 1). The CDF is bermed and storage cell areas are designed in a manner to contain the dredged material on the site and prevent escape of sediment and contaminants into adjacent harbor waters. Approximately 21,800 cubic yards of dredged material will be disposed of at the LA-2 Ocean Dredged Material Disposal Site.

4. A sediment characterization study was conducted for Berths 212-224 in June 2013. Core samples were collected at five locations within the area of Berths 214-216 and combined into a single composite (Composite A) for grain size determinations, toxicity testing, bioaccumulation testing and chemical analyses (figure 2). Core samples also were collected at five locations within the area of Berths 217-220 and combined into a single composite (Composite B) for grain size determinations, toxicity testing, bioaccumulation testing and chemical analyses (figure 2).

An additional sub-composite (Composite A – Bottom) was created in November 2013 from the frozen archived core samples from the Berths 214-216 area to create a composite representing the heavy clay sediment found at the bottom of most of the cores collected in this area. Chemical analyses were conducted on this sub-composite material.

5. The sediment characterization results showed that the material to be dredged from Berths 214-216 and 217-220 is predominantly silt-clay (97.1 % silt-clay for Composite A from Berths 214-216 and 80.5% silt-clay for Composite B from Berths 217-220). This material is not suitable for beneficial reuse for beach replenishment.

The initial sediment test results indicated that Composite Area A material was unsuitable for ocean disposal at LA-2, due to significant acute toxicity observed. However, visual observation of the core samples suggested that there was a significant difference in the character of the material present in the top 2-foot layer of the core and the lower sections of the cores collected in Composite Area A. Consequently, the bottom portion of Composite Area A was retested for PAHs, PCB congeners, chlorinated pesticides, metals and pyrethroids and found to be free of these contaminants. Based on the low levels of metals, absence of organic contaminants and the low potential for bioaccumulation, the bottom layer of Composite Area A is deemed to be composed of native clay material and meets the suitability requirements for ocean disposal at LA-2. The remaining unconsolidated

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~~material from Composite Area A (the top 2-foot layer) is not suitable for ocean disposal, but would be suitable for disposal in the Berth 243-245 Confined Disposal Facility.~~

The Composite Area B material meets the suitability requirements for ocean disposal at LA-2. Although some metals (arsenic, copper and mercury) exceeded the Effects Range-Low thresholds for which toxicity possibly could occur, none of the metals exceeded the Effects Range-Median thresholds for which toxicity would be likely to occur. Acute toxicity was not observed for the Composite Area B material, indicating that these concentrations of metals were not toxic to aquatic organisms. Although some metals (including chromium, copper and lead), some PAHs (including benzo(a) pyrene, benzo(b)fluoranthene, chrysene, fluoroanthene and pyrene) and some PCB congeners (including 52, 138 and 158) showed elevated tissue concentrations compared to reference tissue values, comparison to the United States Army Corps of Engineers Environmental Residual Effects Database values showed that none of these constituents were close to the chronic toxicity thresholds for long term bioaccumulation potential.

6. The United States Corps of Engineers (COE) has granted conditional approval for permit application SPL-2013-00113-TS for the Berths 212-224 dredging project. A final permit is expected to be issued after the COE receives the final Waste Discharge Requirements adopted by the Los Angeles Regional Water Quality Control Board.
7. The Port of Los Angeles and the COE prepared a Draft Environmental Impact Statement/Report (EIS/EIR) for the Berths 212-224 YTI Container Terminal Improvements Project. The Board of Harbor Commissioners certified the EIS/EIR on October 16, 2014.

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Table 1. Sediment Characteristics (2013) – Berths 212-224 Project.

Parameter	Berths 214-216 (Composite A)	Berths 217-220 (Composite B)	Berths 214-216 (Composite A – Bottom)	Sediment screening thresholds
Grain size: Sand/Gravel	2.9 %	19.5 %	Not analyzed	
Grain size: Silt and Clay	97.1 %	80.5 %	Not analyzed	
Silver	0.183 ppm	0.219 ppm	0.112 (estimated)	ERL = 1 ppm ERM = 3.7 ppm
Arsenic	10.4 ppm	8.77 ppm	8.44 ppm	ERL = 8.2 ppm ERM = 70 ppm
Cadmium	0.499 ppm	0.471 ppm	0.423 ppm	ERL = 1.2 ppm ERM = 9.6 ppm
Chromium	35.2 ppm	32.9 ppm	33.7 ppm	ERL = 81 ppm ERM = 370 ppm
Copper	88.8 ppm	60.1 ppm	54.5 ppm	ERL = 8.2 ppm ERM = 70 ppm
Mercury	0.217 ppm	0.171 ppm	0.110 ppm	ERL = 0.15 ppm ERM = 0.71 ppm
Nickel	26.8 ppm	17.3 ppm	28.5 ppm	ERL = 20.9 ppm ERM = 51.6 ppm
Lead	27.3 ppm	22.4 ppm	11.1 ppm	ERL = 46.7 ppm ERM = 218 ppm
Selenium	0.237 ppm	0.415 ppm	0.339 ppm	Not available
Zinc	112 ppm	112 ppm	85.8 ppm	ERL = 150 ppm ERM = 410 ppm
Total DDT	3.1 ppb	15.1 ppb	< 1.4 ppb	ERL = 1.58 ppb ERM = 46.1 ppb
Total PCB	38.44 ppb	0.86 ppb	<0.68 ppb	ERL = 22.7 ppb ERM = 180 ppb
Total PAH	749 ppb	657 ppb	512 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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8. ~~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.~~
9. 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).
10. 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.
11. 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 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.

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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 27,000 cubic yards of sediment and soil, with disposal of up to 21,800 cubic yards of dredged material at the LA-2 ocean disposal site and disposal of up to 5,200 cubic yards of dredged material at Berths 243-245 Confined Disposal Facility.

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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.
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

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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.

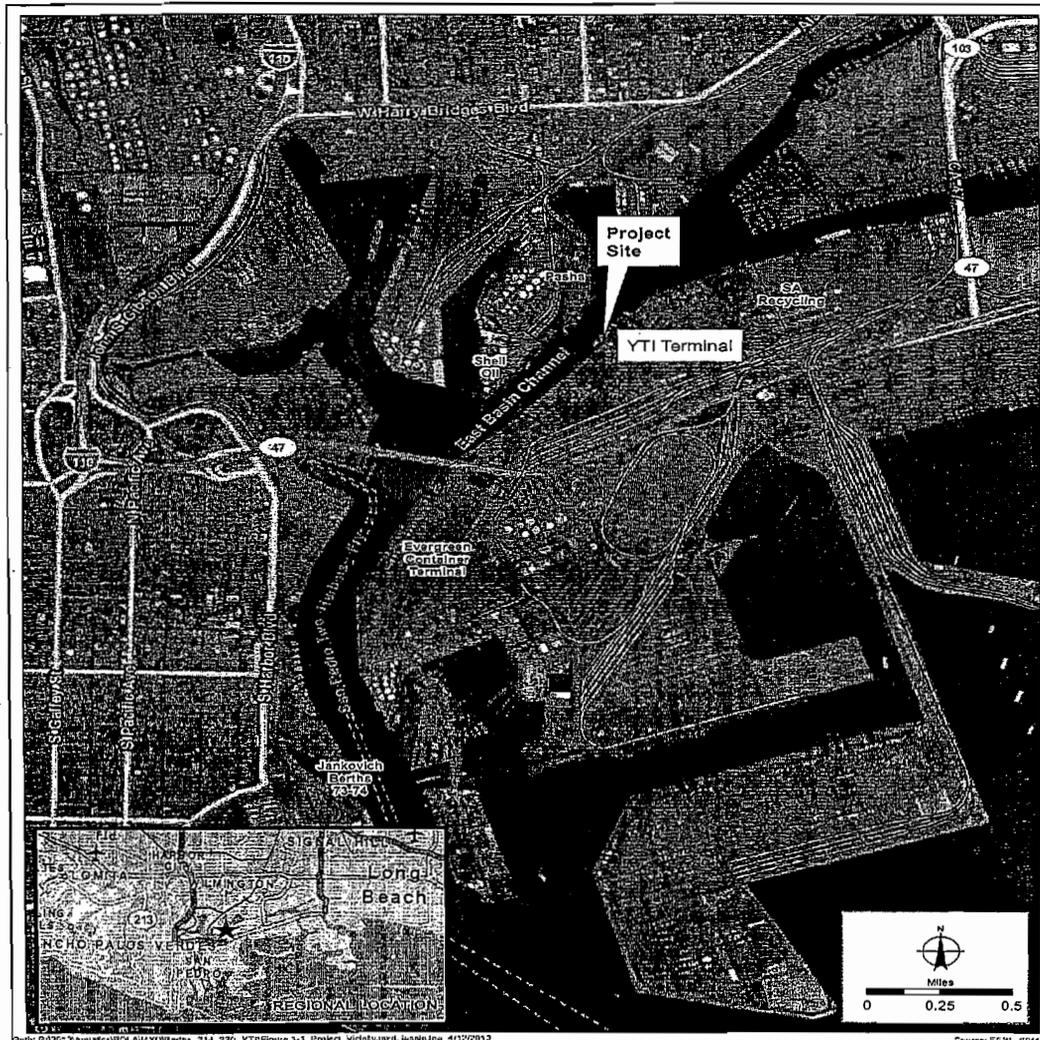
10. This Order fulfills the requirements for a Clean Water Act Section 401 Water Quality Certification for the proposed project. Pursuant to section 3860 of title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:
  - a. this certification 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 December 4, 2014.

SAMUEL UNGER, P.E.  
Executive Officer

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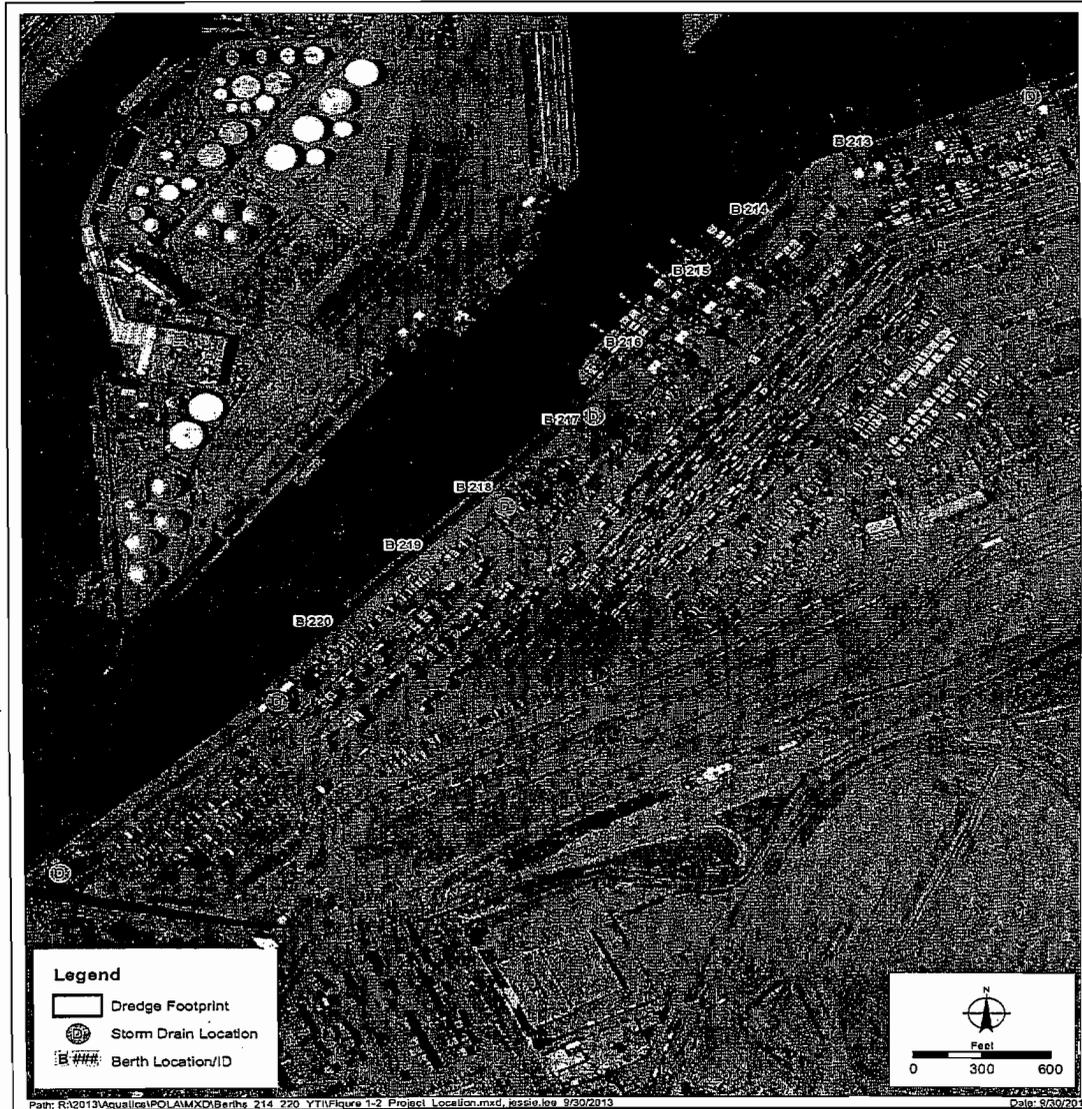


Project Vicinity  
Berths 212-224 [YTI] Container Terminal Improvements Project  
Port of Los Angeles

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Figure 1.  
Location map for Berths 212-224 Redevelopment Project in Los Angeles Harbor.

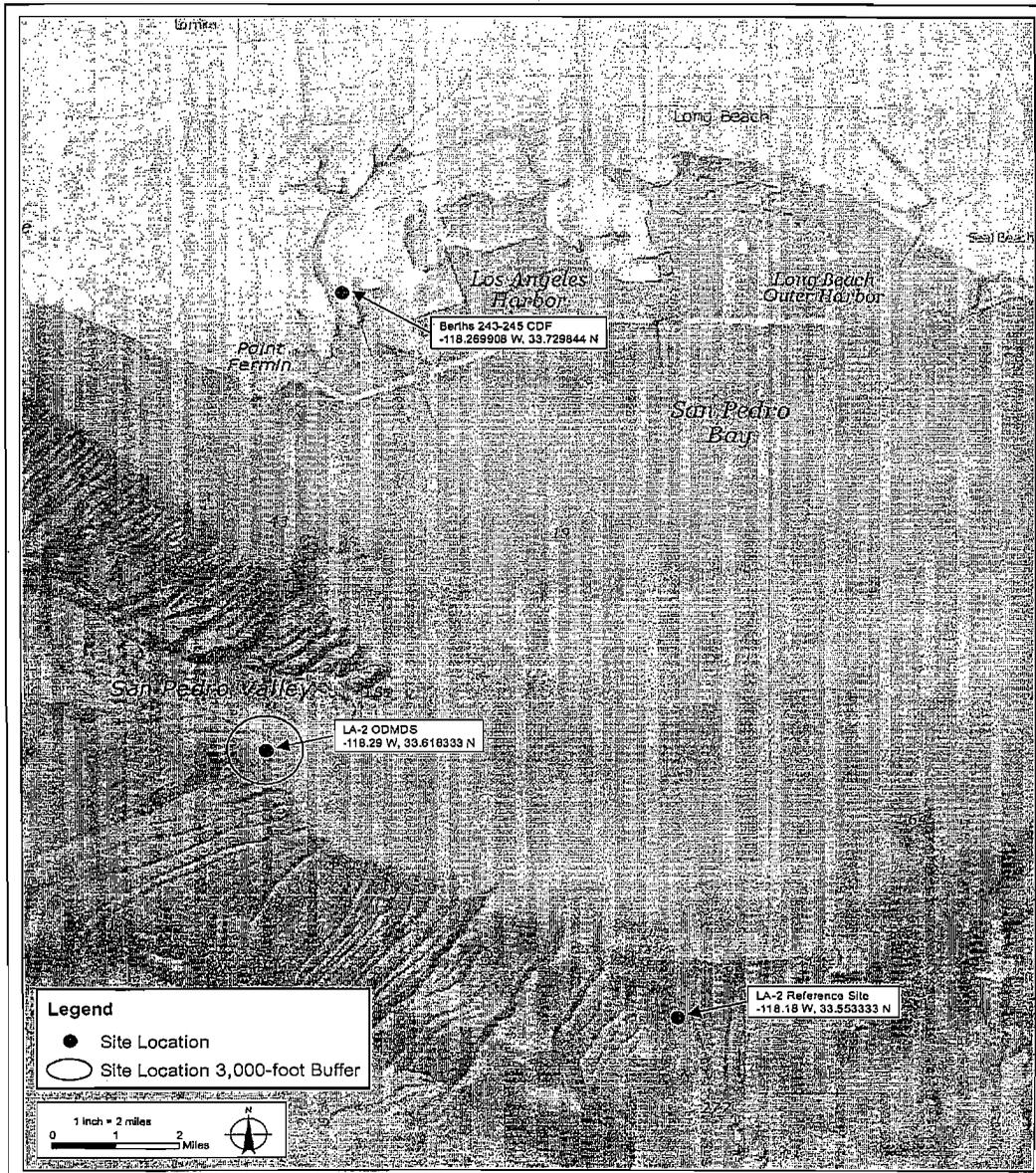


Project Location  
Berths 212-224 [YTI] Container Terminal Improvements Project  
Port of Los Angeles

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Figure 2.  
Dredging footprint for Berths 212-224 Redevelopment Project.



Aerial Source: Esri, Leica, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community



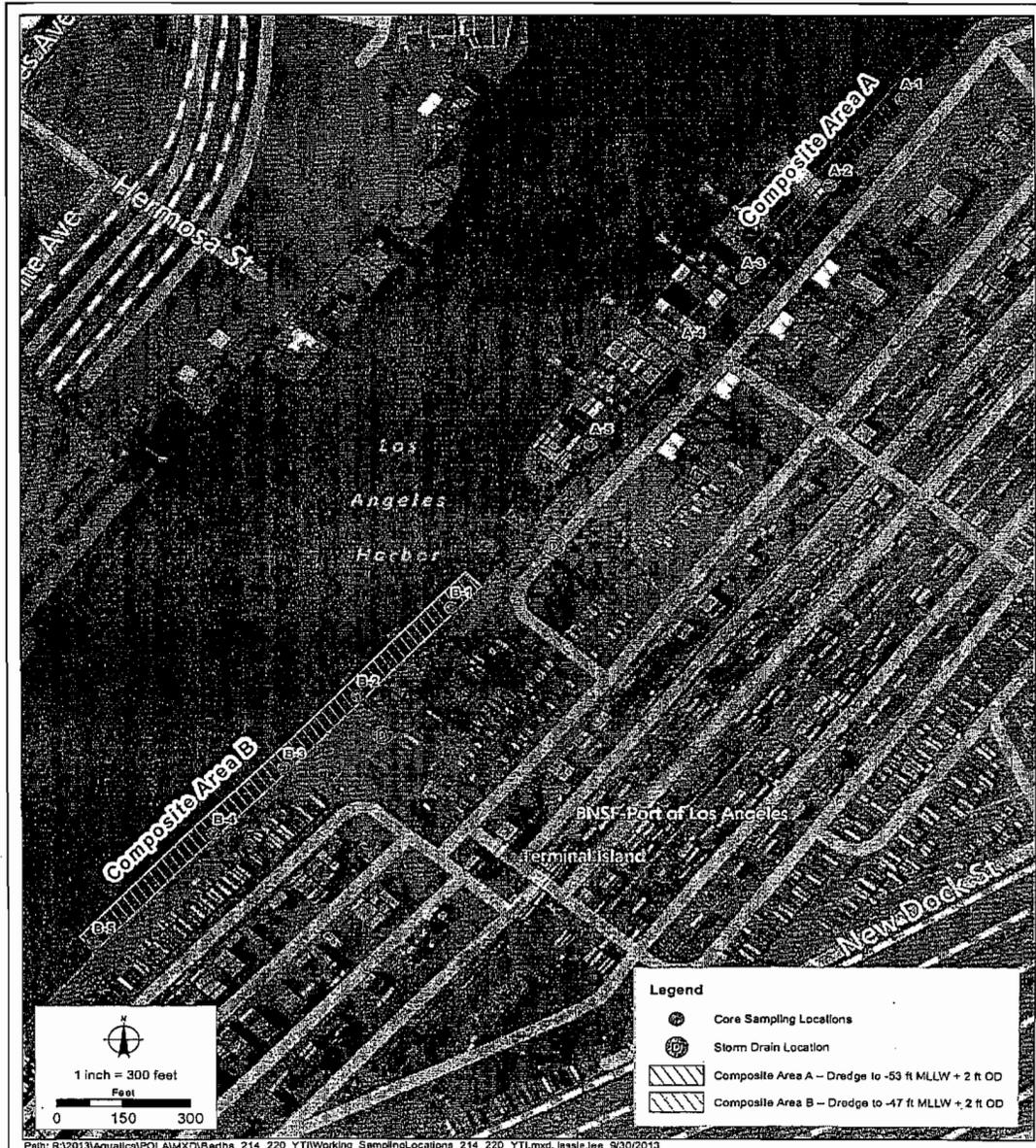
Location of LA-2 Ocean Dredged Material Disposal and Reference Sediment Collection Sites

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Figure 3.  
Location of Berths 243-245 Confined Disposal Facility and LA-2 Ocean Disposal Site.



Core Sampling Locations  
Berths 212-224 [YTI] Container Terminal Improvements Project  
Port of Los Angeles

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Figure 4.  
Location of core sampling locations for sediment characterization study.

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

MONITORING AND REPORTING PROGRAM NO. xxxx  
FOR  
PORT OF LOS ANGELES  
(BERTHS 212-224 REDEVELOPMENT)  
(FILE NO. 14-097)

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:

<u>Station</u>	<u>Description</u>
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

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

<sup>1</sup>Measurements shall be taken throughout the water column (at a minimum, at 2-meter increments).

<sup>2</sup>During the first two weeks of dredging, stations shall be sampled two times per week.

<sup>3</sup>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.

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## 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 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.

## 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.

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Monitoring and Reporting Program No. xxxx  
Port of Los Angeles  
Berths 212-224 Redevelopment

Order No. R4-2014-xxxx

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: December 4, 2014

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**Exhibit 3**

Southern California Dredged Material Management Team (SC-DMMT)  
January 22, 2014  
Draft Meeting Notes

**I. Participating Agencies /Attendees:**

- a. *Theresa Stevens (USACE-Regulatory)*
- b. *John Markham (USACE-Regulatory)*
- c. *Daniel Swenson (USACE-Regulatory)*
- d. *Robert Smith<sup>†</sup> (USACE-Regulatory)*
- e. *Crystal Huerta (USACE-Regulatory)*
- f. *Joe Ryan (USACE-ED)*
- g. *Larry Smith (USACE-Planning)*
- h. *Jeffrey Devein (USACE – Geotech.)*
- i. *Jim Fields (USACE – PPMD)*
- j. *Ken Wong (USACE-PPMD)*
- k. *Kirk Brus (USACE-Planning)*
- l. *Blake Horita (USACE-PPMD)*
- m. *Allan Ota<sup>†</sup> (USEPA Region 9)*
- n. *Bill Paznokas<sup>†</sup> (CA-DFW)*
- o. *Michael Lyons<sup>†</sup> (RWQCB – Los Angeles)*
- p. *Peter Von Langen (RWQCB-Central Coast)*
- q. *Ken Kronschnabl (Contractor, Kennetics)*
- r. *Rachel McPherson (POLA/YTI)*
- s. *Kathryn Kurtis (POLA/YTI)*
- t. *Barry Snyder (AMEC)*
- u. *Laura Masterson (POLA)*
- v. *Alan Monji<sup>†</sup> (RWQCB, San Diego)*
- w. *Lock Dreizler<sup>†</sup> (Port of San Luis Harbor District)*
- x. *Fred Steiner<sup>†</sup> (?)*
- y. *Carol Roberts<sup>†</sup> (USFWS)*
- z. *Jason Conder (POLA Everport)*
- aa. *David Moore (POLA Everport)*
- bb. *Melissa Grover (POLA Everport)*
- cc. *Shelly Anghera (Anchor QEA)*
- dd. *Chris Osuch (Anchor QEA)*
- ee. *Tom Mathews (CAA Planning Inc)*
- ff. *Paul Grdner (Newfields)*
- gg. *Gerry Salas (USACE-Regulatory)*
- hh. *Janna Watanabe (POLB)*

**† participating via teleconference.**

## II. Announcements:

- a. **Upcoming SC-DMMT meeting coordinator rotations:**
  - i. Bonnie Rogers Feb-Mar,
  - ii. Brianne McGuffie Apr-May,
  - iii. Gerardo Salas Jun-Jul,
  - iv. Steve Estes Aug-Sep.
  
- b. **Please review the times for your project. If you think you need more or less time, please contact agenda POC ASAP.**
  - i. Default time is 45 minutes.
  - ii. Projects generally requiring less time: small number of samples, small dredging area, intended discharge/disposal is CDF or landfill, projects where sampling results resulted in no SQG exceedances.
  - iii. Projects generally requiring more time: very large number of samples, very large dredging area(s), intended discharge/disposal is beach nourishment or offshore disposal site and many ERLS, any ERMs, or other SQGs are exceeded.
  - iv. New agenda request format:
    1. Project name:
    2. Applicant:
    3. Project Type (Regulatory/Navigation):
    4. Meeting Type (DMMT/CSTF):
    5. Purpose/Topic (e.g., SAP, SAPR and/or suitability determination):
    6. Presentation (y/n):
    7. **Time requested: \_\_\_ minutes**
  
- c. **Please use the following subject line for agenda requests:**
  - i. "SC-DMMT AGENDA REQUEST: [project name]..."

## III. Project Review and Determinations

- a. **#1 Berths 212-224 Yusen Container Terminal Improvements Project (Theresa Stevens):** Summary by POLA: As a result of the EPA's and RWQCB's recommendation at the November 20, 2013 SC-CSTF/DMMT meeting, the clay, or "bottom" portion of Composite Area A was retested for PAHs, PCB Congeners, Chlorinated Pesticides, Metals and Pyrethroids. Barry Snyder of AMEC presented the results of the retest. The retested material was entirely free of all PCB Congeners, all Chlorinated Pesticides (including DDTs), and Pyrethroids above the reporting limit. Only one Pyrethroid (Permethrin-Cis/Trans) was detected, but it was reported as an estimated value (i.e. J-flagged) because it was detected below the reporting limit. It was noted by Mr. Snyder that the detection of this low level of Permethrin-Cis/Trans might be attributed to

lab contamination. Based on the low levels of metal and organic contaminants observed, the fact that only three ERL exceedances were observed (no ERM exceedances), and the low potential for bioaccumulation, confirms that the Composite Area A bottom layer is composed of native clay material. The Port recommended that the Composite Area A bottom layer and the all the Composite Area B material meets the suitability requirements for ocean disposal at LA-2. In addition, the Port recommended that the remaining upper unconsolidated material from Composite Area A (the top 2-foot layer) be placed in the Berth 243-245 Confined Disposal Facility (CDF).

**i. Corps (Regulatory) comments:**

1. Corps regulatory division staff (Swenson) concerned about inconsistent decision making between Regional Boards with respect to ocean disposal. Corps PM (Stevens) asked EPA if a future ocean disposal approval letter would be forthcoming if the material was deemed suitable for ocean disposal.
2. Corps asked why the Permethrin finding was erroneous and Barry said: It would be highly unlikely to detect pyrethroid pesticides in sediment and not also see DDT/DDE, since DDT/DDE are ubiquitous throughout the Port. DDT/DDE was in common use before synthetic pyrethroid pesticides were developed. DDE was even observed within the LA-2 reference sediments for this project. Based upon these observations, it is likely that the Permethrin observed at low levels in the Composite Area A clay layer is due to lab contamination.

**ii. Corps (Planning) comments:**

1. Larry asked if there was retesting of grain size analysis for the clay/bottom material? Barry replied there was not because 1) the material had been frozen (which affects the particle size characteristics of a sample) and 2) there was not sufficient material remaining following the chemical tests to conduct the grain size test. Barry indicated that there are very good pictures of the consistency of the clay material included in the appendix of the draft report.

**iii. USFWS comments:**

1. None.

**iv. CDFW comments:**

1. Asked when the EIR/EIS will be out and whether EPA would comment; Allan Ota affirmed he would comment.

**v. RWQCB comments:**

1. Michael Lyons indicated the material was suitable for ocean disposal on technical grounds but reiterated that this would make no difference to the Regional Board. In response to the Corps concerns about the lack of consistency in decision making among different Regions, which usually get elevated by the Corps to the State Board, Michael indicated the State Board has no authority over appointed reps in the Region.

**vi. EPA comments:**

1. EPA staff agreed that the stratified test results showed that some of the sediment was suitable for ocean disposal and agreed an approval letter may be forthcoming but this would be completed at the end of the Corps permit process.

**vii. Other comments:**

1. The Port staff asked everyone to provide a suitability determination for the re-tested material and also reminded the group that the CSTF was formed to address “contaminated” sediments, not sediments that test clean. This fact seems to have been forgotten amid the political agendas of the RWQCB board members and Heal the Bay which have resulted in all dredged material being placed in the CDF recently rather than clean material being taken to LA-2.
2. Dan Swensen suggested that the Port contact the Coastal Commission to get their input since they were unable to participate in this meeting (see below).
3. The EIR/S will be available for public review in April or May.

**viii. Conclusions:**

1. All CSTF agencies present at the meeting concurred that the bottom portion of Area A and the entirety of Area B were suitable for LA-2 disposal. The Port confirmed that the top (approximately 2 feet) portion of Area A would be disposed of in the Berths 243-245 approved CDF.
2. The Port subsequently contacted the Coastal Commission, who was not present at this CSTF meeting, and they concurred with the suitability determination made at the meeting via email to Kathryn Curtis (sent January 29, 2014 by Larry Simon). Excerpt from email: “Jack and I just discussed this matter and we concur with the decisions made at the recent DMMT meeting regarding the YTI and Everport projects, as described in your email below. As

you know, disposal of suitable dredged materials at LA-2 will require the POLA to prepare and submit a consistency certification to the Commission”

**b. #2 Berths 226-236 Everport Container Terminal Improvements Project (Theresa Stevens):**

**i. Corps (Regulatory) comments:**

1. Corps PM asked the group to provide comments today, and asked if a revised SAP (using strikeout/underline) could be reviewed via email in lieu of returning to next months’ meeting.
2. Corps suggested reaching out to CCC on project.

**ii. Corps (Planning) comments:**

1. None

**iii. USFWS comments:**

1. None

**iv. CDFW comments:**

1. Agreed to email review of revised SAP.
2. Bill-Regarding z-layer samples asked the Port to archive not only the z-layer composite samples but also the z-layer samples from individual core locations.
3. David Moore pointed out that it was possible z-layer samples would not be collected at every location due to refusal.

**v. RWQCB comments:**

1. Agreed to email review of revised SAP.

**vi. EPA comments:**

1. Agreed to email review of revised SAP. Requested a change to the title of the report to reflect the berths that would be dredged rather than the entire terminal. Applicant also agreed to check on location of storm drains.
2. Allen- the SAP is straightforward, although inclusion of the Berth 229 maintenance dredging area with the Berths 232-228 dredging was odd, but he understood that because the volume was so small it made sense to combine with one of the adjacent areas. He noted that the chemistry Table 4 needed to include selenium and silver, as well as pyrethroids.

3. Dan Swenson will send ENVIRON the latest draft SAP guidelines that include the latest list of recommended analytes including the specific pyrethroids to be evaluated.

**vii. Other comments:**

1. Dan Swenson suggested that the Port contact the CCC to get their input on the SAP, since they were unable to participate in this meeting (see below).
2. The Port will contact the CCC for their input, and make the following changes to the SAP: (1) include storm drain locations on a map and determine whether any of the proposed sampling locations needed to be shifted accordingly, (2) clarify in the SAP text that both individual and composite z-layer samples will be archived, (3) selenium, silver, and the appropriate pyrethroids will be added to the analyte list in the SAP. The Port will then submit a revised SAP (redlined to highlight the changes) for final agency review and concurrence via email.
3. The CCC subsequently concurred with the other agencies regarding the SAP comments via email to Kathryn Curtis (sent January 29, 2014 by Larry Simon). Excerpt from email: "Jack and I just discussed this matter and we concur with the decisions made at the recent DMMT meeting regarding the YTI and Everport projects, as described in your email below".

**c. #3 Alamos Bay Marine Basins 2 and 3 Maintenance Dredging (Brianne McGuffie):**

**i. Corps (Regulatory) comments:**

1. Corps requested a copy of the tissue analyte list that Anchor QEA will be sending to EPA (slide 10 of presentation).  
Response: a copy will be provided to the Corps.
2. Corps permit does not specify how much material per basin, but just specifies a total amount of cubic yards for combined basins (i.e. Basins 1-7).
3. Are the proposed sampling locations the same as the 2007 sampling event?

Response: some points overlap but not all of them. There are more sampling points currently proposed.

Response: EPA will need to view the color-coded change in sedimentation map that Anchor QEA will be sending out before determining if sampling locations are sufficient.

**ii. Corps (Planning) comments:**

1. To EPA: do we really need the full Tier III testing again since the area was already fully tested in April 2007 and approved by EPA for LA-2 disposal in 2008?

Response: if the bathymetry hasn't changed much it's possible to just do sediment chemistry analysis and based on those results decide whether further Tier III testing is appropriate.

**iii. USFWS comments:**

1. N/A

**iv. CDFW comments:**

1. N/A

**v. RWQCB comments:**

1. Okay with holding off on Tier III testing, however, cannot increase the dredge volumes of the basins (i.e. increasing Basin 2 from 89900 to 96000 cy). If you want to modify the permit it will be very difficult to get approval again to go to LA-2, as previous approval was granted very reluctantly.

Response from QEA: The City will be notified that they cannot exceed the 89,900 cy for basin 2, as specified in their RWQCB permit.

2. Does the City plan on completing this work prior to the expiration of the RWQCB permit, which expires in October 2015? It would be wise to do so in order to ensure disposal LA-2.

**vi. EPA comments:**

1. Keep in mind that additional testing may still be required depending on the new chemistry results.
2. Is there a fuel dock or storm drains present?

Response: There is a fuel dock between Basins 1 and 2; B2DU1-02 sampling point is the closest sampling point available. There is also a pump-out station on the fuel dock.

**vii. Anchor QEA comments:**

1. The color-coded map depicting changes in bathymetry will be emailed to the DMMT, along with an updated SAP with a revised Table 7 to include pyrethroids, and an explanation of the new plan to proceed with Tier II testing and reserve Tier III testing for later, if it ends up being required.

Comment: The City of Long Beach concurs with the phased testing approach of Anchor QEA.

**d. #4 City of Newport Beach and Irvine Company (Robert Smith):**

**i. Corps (Regulatory) comments:**

1. Were there any culverts and if so, please show them.
2. Where is the grain size data and was there any grain size envelopes available?
3. Is there an upper silty sand layer in Area A near Area B that may be related to the Area B amphipod mortality?
4. Can the SAP be revised to discuss the compositing issues that were discussed.
5. Is the material going to nearshore or beach sites? If so the Corps would need to approve the nearshore or beach grain size and other data.

**ii. Corps (Planning) comments:**

1. None

**iii. USFWS comments:**

1. None

**iv. CDFW comments:**

1. None

**v. RWQCB comments:**

1. None

**vi. EPA comments:**

1. Suggested memo about additional testing and odor and Corps suggested revised SAPR.

**vii. Other comments:**

1. Note there are no ERM exceedances, but zero percent bioassay survival in Area B.
2. Note that material from Area A could go to LA-3 while material from Area B is not suitable for off-shore disposal.

**e. #5 Port San Luis Maintenance Dredging and District Maintenance (Crystal Huerta):**

**i. Corps (Regulatory) comments:**

1. Presented the Sediment Sampling and Analysis Report dated November 15, 2013.
2. No organo-pesticides or PAH's were detected in any of the samples. The samples were also free of sulfides. All samples are characterized as coarse to medium grained sand, with fines ranging from 1.4-4.1%, and when six sites were tested in 2009 results were similar at all the six sites with the percentage of fines ranging from 0.1-5.4%.
3. The Corps has no objections to re-authorizing the permit.
4. Coastal Commission was not on the call therefore the Corps will check and make sure that they are satisfied with these SAP results.
5. (Dan Swenson) wanted to know the location of the grain size discussion and what the fate of the material is.

**ii. Corps (Planning) comments:**

1. No additional comments.

**iii. USFWS comments:**

1. No additional comments.

**iv. CDFW comments:**

1. (Bill Paznokas) Make sure the proposed project would avoid eelgrass. No additional comments.

**v. RWQCB comments:**

1. Not concerned. No additional comments.

**vi. EPA comments:**

1. (Allen Ota) Communicated that 250,000 CY seemed excessive for an annual maximum. Expressed curiosity of the volume limits and the historical need of this annual maximum.
2. Did not have further concerns and feels that the sand is clean.

**vii. Other comments:**

1. (Lock Dreizler-Permittee)-In response to Dan Swenson's comments stated that there is no more build up than erosion and that the fate of the material stays within the crane with a versatile pump.

2. Applicant noted they have been in contact with CCC.

**f. #6 Pier T, Pier S, Back Channel and Turning Basin SAP (John Markham):**

**i. Corps (Regulatory) comments:**

1. Dredge Locations:

- a. Western Anchorage: Was the Western Anchorage site described in Middle Harbor presentation characterized previously? It is not described in the SAP under review. Response (Port): Recent report prepared by AMEC in 2012, SAP approved in (date TBD). Material seems to be suitable for CDF disposal/re-use, but the results of the SAPR will be presented in a future DMMT/CSTF meeting
- b. Pier T: Good to have a color contour for amount of cut. Response (Port): See figure 2. This distinction may not be very visible in this case due to steep slopes and amount of cut. Also see table 7 for locations for mudline elevations, which vary from -48.5 MLLW to -53 MLLW and average ~ -51.5 MLLW.
- c. Pier S: All sediment cores within channel are in approximately same line, as opposed to (standard) randomized locations throughout dredge units. Response: for desired (longer) length of the cores (15-20 feet) and steepness of slopes, they had to remain at these locations.
- d. Back Channel & Back Channel Turning Basin: Has the Port identified any major storm drains or discharge pipes? Response: Yes, but not on diagrams. No obvious locations to focus sampling sites. Port could revise or add a figure that represents the larger stormwater outfalls & discharge pipes (e.g., outfalls).

2. Disposal locations:

- a. Temporary Aquatic Storage: Why is bioaccumulation testing not proposed, as it will likely sit for months or years, and bioaccumulation testing itself only requires a 25-day period. Response: The CSTF/DMMT SAP Guidelines do not require this. However, this is a requirement of the new Regional Board permit for 5-year maintenance dredging. At Corps, Regional Board, and USEPA request, the Port will revise SAP to add

bioaccumulation testing for temporary aquatic storage.

3. No objections to SAP, but revised SAP should be distributed to CSTF/DMMT prior to implementation.

**ii. Corps (Planning) comments:**

1. Dredge Locations:

- a. Pier S: Yellow area that represents side slopes, for example, south of PS-DU-01, side slope is in water, so why is there is no core in this location. Response: given the steepness of side slopes, coring of in-water slope is too difficult.
- b. Back Channel & Back Channel Turning Basin: Figure 8, BC-DU-02 contains no cores in water on slope, which could be missing important data points (reiterated by EPA). Response: Port will revise sampling locations to add sampling of side slopes (which are to be excavated) for Back Channel and BC Turning Basin.

**iii. USFWS comments:**

1. No comments recorded.

**iv. CDFW comments:**

1. Disposal Locations:

- a. Temporary Aquatic Storage: Where are the proposed locations of Temporary Aquatic Storage areas, other than Western Anchorage? Response: Port will revise SAP accordingly.
- b. No objections to SAP.

**v. RWQCB comments:**

1. Disposal Locations:

- a. Temporary Aquatic Disposal Site: The new Regional Board permit for 5-year maintenance dredging requires bioaccumulation testing for these proposed disposal/storage sites. At Corps, Regional Board, and USEPA request, the Port will revise SAP to add bioaccumulation testing for temporary aquatic storage
- b. No objections to SAP, but revised SAP should be distributed to CSTF/DMMT prior to implementation.

**vi. EPA comments:**

1. Dredge Locations:

- a. Pier T: In Middle Harbor presentation, the dimensions of Slides 3 and 4 do not seem consistent, 1 of them seems inaccurate. Response: Port agrees, but it is likely due to differing scale of aerials.
- b. Pier T: Dredging proposed here is for “deepening”, and therefore is occurring predominantly in native material? Response: Yes, except where wharf/bulkhead was previously installed along Pier T face.
- c. Pier T: Figure 11 (testing flow chart for Pier T) is incorrect. If fail Phase II BP testing and Tissue chemistry, then must return to TTLC comparison or Phase II EET and SET chemistry. Response: Port will revise accordingly.
- d. Pier S: Did overlying fill layer located on slope or uplands come from a land source? Response: Yes, but the thickness, sediment quality, and soil profile are to be determined through testing.
- e. Pier S: No objections to use of this excavated (upland) material within MH CDF area. Response: Comment noted.
- f. Back Channel & BC Turning Basin: Comparing MH presentation & this SAP: Presentation (slide 7) indicates that MH East Basin Part 1 requires 2 million cy, whereas SAP speaks of 1 million cy needed. Which of these is correct? In addition, LA-2 has 1 million cy per year volume capacity (2005), therefore LA-3 would need to be proposed. Response: Port is over-sampling in order to have material available at these various disposal locations as needed, and thus their estimates may not be consistent. Latter comment noted.
- g. Back Channel & BC Turning Basin: Figures 7 through 10: Revise sampling locations to add sampling within side slopes where dredging is proposed (blue hatched and gold hatched areas). Response: Port will revise accordingly, at request of Corps Planning and EPA.
- h. Injection of deep soil cement occurs prior to dredging itself? In the water; i.e., in direct contact with marine environment? Response: Yes. Port will send description to CSTF/DMMT, including potential interaction with the marine environment.

2. No objections to SAP, but revised SAP should be distributed to CSTF/DMMT prior to implementation.

**vii. POLA comments:**

1. Middle Harbor fill project update (see presentation)
  - a. MH Fill Sequence: Slip 1 → Pier E Extension → East Basin Part 1 → East Basin Part 2
  - b. Slip 1 nearly complete, including surcharge/cap layer; material re-used from various sources, including Port and third parties.
  - c. East Basin Part 1: Between 1-2,000,000 cy of fill material needed, including surcharge/cap
    - i. Source of fill may come from Pier S, Back Channel & Back Channel Turning Basin, Pier T and Pier T Entrance Channel, and Western Anchorage site = total 3.7 million cy available.
    - ii. See slide for East Basin Part 1 tentative fill plan.
  - d. East Basin Part 2: amount of fill material TBD
2. Pier T & Entrance Channel (see presentation)
  - a. Dredging at this potential borrow site is planned along Berths T132-140 and the West Basin Approach Channel to a depth of -55 feet mean lower low water (MLLW), plus 2 feet of allowable overdepth. The proposed area to be dredged has been sectioned into 11 dredge units (DUs) for the purpose of sampling and analysis activities (see SAP Figure 2).
  - b. The total volume of proposed dredged material is estimated to be 934,000 cy, consisting of 485,000 cy above design depth and 449,000 cy of allowable overdepth.
  - c. The SAP also provides a summary of prior sediment investigations at Pier T, Pier S, and Back Channel & Back Channel Turning Basin.
3. Pier S
  - a. The Pier S project includes widening the Cerritos Channel. The wharf area includes a long submerged slope where a portion has been topped with clean imported soil to allow access to the site during previous improvements activities. Investigations require land-based borings through fill soil to historically subaqueous sediments that were

covered during development of Pier S. Dredging and/or excavation are planned at Pier S to a depth of -52 feet MLLW, plus 2 feet of allowable overdepth. The proposed area to be dredged and/or excavated has been sectioned into seven DUs for the purpose of sampling and analysis activities (Figure 3). Five DUs are located within Cerritos Channel and two DUs are located along the shoreline of Pier S. A typical cross section at Pier S is presented on Figure 4.

- b. The total volume of proposed dredged and/or excavated material is estimated to be 502,000 cy, consisting of 464,000 cy above project depth and 38,000 cy of allowable overdepth. Volume estimates for landside DUs (PS-DU06 and PS-DU07) does not include the overlying fill soil that was previously placed at this location; this material will be beneficially reused at upland Port locations unless the CSTF/DMMT approves re-use at Middle Harbor.

4. Back Channel & BC Turning Basin:

- a. Dredging is planned within the Back Channel and Turning Basin to a depth of -52 feet MLLW, plus 2 feet of allowable overdepth. The proposed area to be dredged has been sectioned into four DUs.
- b. The total volume of proposed dredged material is estimated to be 178,000 cy, consisting of 151,000 cy above project depth and 27,000 cy of allowable overdepth.

**g. #7 Morro Bay Harbor (Blake Horita and Kirk Brus):**

**i. Corps (Regulatory) comments:**

- 1. None

**ii. Corps (Planning) comments:**

- 1. None

**iii. USFWS comments:**

- 1. None

**iv. CDFW comments:**

- 1. Though not directly related to the 2013 Morro Bay Harbor federal Final SAPR and Suitability Determination Report, and Appendices, Bill asked if the maintenance dredging has

affects on the birds (e.g., western snowy plover) or vegetation (e. g., eelgrass) in Morro Bay. As the CDFW point of contact (POC) Eric Wilkins (CDFW) who covers the Morro Bay area was on the SC-DMMT monthly meeting by teleconference, Eric responded that the timing of the maintenance dredging (e.g., when the dredging occurs) determines which species (birds) or plants (eelgrass) could be affected, and Eric said he would have to research further on the species in the Morro Bay area. The Corps response about the CDFW discussion on species and the potential affect from Morro Bay Harbor federal maintenance dredging project would be discussed in the new 6 year Environmental Assessment (EA) for Morro Bay Harbor (federal) maintenance dredging project, and that Eric Wilkins (CDFW) is on the mailing distribution for review of the new 6 year draft EA when the new 6 year EA is ready for dissemination.

2. Bill Paznokas communicated that he had no problems with the Final SAP, 2013 Morro Bay Harbor federal Final SAPR and Suitability Determination Report, and Appendices.

**v. RWQCB comments:**

1. Though not directly related to the 2013 SAPR and Suitability Report, Peter Von Langen (Central Coast Water Quality Control Board) said that when the previous placement dredged material was piped onto Morro Strand State Beach, the public complained about an odor.

**\*Post January 22, 2014 SC-DMMT monthly meeting:**

The Corps response to Peter Von Langen's request, the Corps would work with the local sponsor, Morro Bay Harbor District, on putting up a sign, or sending out a notice to the public, that dredged material is being placed at Morro Strand State Beach through a pipeline.

**vi. EPA comments:**

1. Allan Ota (USEPA) was not able to participate in the phone call so he relayed his comments to Dan Swenson and Larry Smith. Allan's comments were on 2 separate cores, -20 and -23, in Table 10 of the 2013 Report. It should be noted these comments were previously provided during the November 20, 2013 SC-DMMT meeting.

**\*Post January 22, 2014 SC-DMMT monthly meeting:**

As a followup from the January 22, 2014, SC-DMMT

meeting Kirk Brus incorporation Allan Ota's comments into the 2013 Final SAPR and Suitability Report.

The Corps incorporated Allan Ota's review comments on Table 10. Test results in Table 10 are below project depth overdepths (also referred to as advanced maintenance depths) that WILL NOT be dredged as part of the Corps dredging project. The new discussion about cores -20 and -23 in Table 10 is located under Section 5.0, Discussion, on page 63, in the 2013 Morro Bay Harbor (federal) Final SAPR and Suitability Determination Report.

Table 9 was also updated (2013 Morro Bay Sieve Analysis Data above Project or Overdredge Depth For Each Individual Cores) to show data and the project depth that WILL be dredged by the Corps dredging project. This updated discussion for Table 9 is located under Section 5.0, Discussion, on page 63, in the 2013 Final SAPR and Suitability Report.

**vii. Other comments:**

1. Kirk Brus discussed the previous November 20, 2013 review comments from the SC-DMMT on the 2013 Morro Bay Harbor (federal) Final SAPR and Suitability Determination Report and its Appendices, and provided Corps responses and an explanation how each comment had been resolved. As there were no new review comments, Kirk Brus asked to finalize the documents.

**IV. Other issues:**

- a. Finalization of SPL SAP/SAPR guidelines including database submittal requirement:
  - i. See documents regarding on-going effort to consolidate sediment testing data in a centralized database across multiple Corps districts (SAGA).
  - ii. Final data schema expected in 1-2 months.
  - iii. Website including mapping interface expected in approx. 9 months.
  - iv. Would allow labs to submit their data and agencies to export data.
  - v. Plan: finalize guidelines with requirement to submit data using SAGA templates until SAGA interface operational, then to submit directly through SAGA. Prior data submittals will be loaded at that time.
- b. Demo requested, but not available at this time.
- c. Question: how will it be funded? [query pending with SAGA staff].

**Exhibit 4**

**Site Management & Monitoring Plan  
for Three Southern California  
Ocean Dredged Material Disposal Sites:  
LA-2, LA-3, and LA-5**

**Prepared by US EPA Region IX  
and  
US Army Corps of Engineers, Los Angeles District**

**Updated April, 2009**

## 1.0 Introduction

The disposal of dredged material in ocean waters, including the territorial sea is regulated under the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA), 33 U.S.C. § 1401, ff. The transportation of dredged material for disposal into ocean waters is permitted by the U.S. Army Corps of Engineers (USACE) (or, in the case of federal projects, authorized for disposal under MPRSA §103(e)) only after environmental criteria established by U.S. Environmental Protection Agency (EPA) are applied. The Water Resources Development Act of 1992 (WRDA 92; Public Law 102-580) made a number of changes to the MPRSA. As amended by Section 506 of WRDA 92, Section 102 (c) of the MPRSA provides that, in the case of ocean dredged material disposal sites (ODMDS), no site shall receive a final designation unless a management plan has been developed. EPA and the USACE issued a joint guidance document in February 1996 for the development of ocean dredged material disposal site management plans (EPA/USACE, 1996).

MPRSA Section 102(c)(3), as amended by WRDA 92, sets forth a number of requirements regarding the content and development of site management plans, including:

- (A) a baseline assessment of conditions at the site;
- (B) a program for monitoring the site;
- (C) special management conditions or practices to be implemented at each site that are necessary for protection of the environment;
- (D) consideration of the quantity of the material to be disposed of at the site, and the presence, nature, and bioavailability of the contaminants in the material;
- (E) consideration of the anticipated use of the site over the long term, including the anticipated closure date for the site, if applicable, and any need for management of the site after the closure of the site; and
- (F) a schedule for review and revision of the plan (which shall not be reviewed and revised less frequently than 10 years after adoption of the plan, and every 10 years thereafter).

Similar ocean dredged material disposal sites receiving similar material may be combined into a single management plan provided that all MPRSA Section 102 (c)(3) requirements are met for each site (EPA/USACE, 1996).

EPA manages three ocean disposal sites that qualify under this criterion: LA-2 off the ports of Los Angeles and Long Beach, LA-3 off Newport Beach, and LA-5 off San Diego Bay (Figure 1). Disposal at these sites is coordinated jointly by the same offices of EPA (Region IX) and USACE (Los Angeles District); therefore, this SMMP will fulfill the requirements for all three disposal sites.

The requirements of this Site Management and Monitoring Plan (SMMP) (and the compliance and enforcement provisions of the MPRSA regulations themselves) apply to all projects using the LA-2, LA-3 or LA-5 sites, including projects which have received an "ocean dumping permit" issued by the USACE under Section 103 of the MPRSA, as well as federal projects conducted by or for the USACE. Throughout this SMMP, the term "permittee" is used generically to apply to all these projects, even though the USACE does not issue a "permit" for its own dredging projects.

## 2.0 Disposal Site Characteristics and Limits

A comprehensive description of physical, chemical, and biological characteristics of the sediments and water column at LA-2 and LA-3 can be found in the LA-2/LA-3 FEIS (EPA 2005), and for LA-5 in the LA-5 FEIS (EPA 1991). A brief description of each site is presented below, and in Table 2.

The LA-2 disposal site (Figure 2) is located on the outer continental shelf margin, at the upper southern wall of San Pedro Sea Valley, at depths from 380-1060 ft (110 to 320 m), about 6.8 miles (11 km) south-southwest of the Queens Gate entrance to the Los Angeles/Long Beach Harbor. The site is centered at 33°37'6" N and 118°17'24" W with an overall radius of 3000 ft (915 meters). However, disposal vessels must be fully within the smaller 1,000 ft (305 m) radius Surface Disposal Zone (SDZ), centered at the same coordinates, when discharging dredged material.

The LA-3 disposal site (Figure 3) is located on the continental slope near the Newport Submarine Canyon at a depth of about 1,475 ft (450 m), approximately 5.4 miles (8.5 km) southwest of the entrance of Newport Harbor. The site is centered at 33°31'00" N and 117°53'30" W, with a 3000 ft (915 m) radius. However, disposal vessels must be fully within the smaller 1,000 ft (305 m) radius Surface Disposal Zone (SDZ), centered at the same coordinates, when discharging dredged material.

The LA-5 disposal site (Figure 4) is located on the continental shelf approximately 7 miles (11.3 km) southwest of Point Loma, at a depth of 460-660 ft (145-200 m). The site is centered at **[NAD 27!]** 32°36.83' N and 117°20.67' W **[NAD 27!]** with an overall radius of 3000 ft (915 meters). However, disposal vessels must be fully within the smaller 1,000 ft (305 m) radius Surface Disposal Zone (SDZ), centered at the same coordinates, when discharging dredged material.

**Table 1. Dimensions and Center Coordinates for the Three Southern California Ocean Disposal Sites, and Their Surface Disposal Zones (SDZ)**

Disposal Site	Dimensions		Center Coordinates		
	Radius of SDZ*	Radius of Overall Site	Latitude (NAD 83)	Longitude (NAD 83)	Cubic yards per year
LA-2 (Los Angeles)	1000 ft	3000 ft	33°37'6" N	118°17'24" W	1,000,000
LA-3 (Newport)	1000 ft	3000 ft	33°31'00"N	117°53'30"W	2,500,000
LA-5 (San Diego)	1000 ft	3000 ft	32°36.83'N; <b><u>NAD 27</u></b>	117°20.67' W <b><u>NAD 27</u></b>	Designated at 700,000 (historical maximum)

\* Surface Disposal Zone: disposal vessels must be entirely within this smaller zone when discharging dredged material.

### 3.0 Site Management Plan

This management plan has been developed jointly by the U.S. EPA Region IX and the USACE Los Angeles District. The LA-2, LA-3, and LA-5 sites have been in use since the mid-1970s. The LA-2 site was used as an interim disposal site until officially designated as a permanent disposal site in 1991. The LA-3 site was in interim status until 2005, when EPA designated it as a permanent site (and adjusted its location slightly); and LA-5 was an interim site until designated as a permanent site in 1992. While a site management plan for the LA-2 site was established previously, the 2005 site designation EIS for LA-3 provided the opportunity to re-examine both sites in light of historical data on the effects of three decades of dredged material disposal and to design a coordinated management/monitoring plan that would allow effective natural resource coordination by the EPA and USACE for both sites. Now, EPA and USACE are combining all three southern California ODMDS under a single SMMP. We are taking this step in order to minimize confusion for dredgers and permit writers, and because the site use conditions are virtually identical among the three sites.

#### 3.1 Background

This SMMP for the three southern California ODMDS was developed with the advantage of having more than 25 years of agency experience managing these two sites. A wealth of management and monitoring data exists (see EPA 1992?, EPA 2005, Germano & Assoc. 2008)), and the streamlined nature of the plan reflects many of the lessons learned from past disposal projects and monitoring surveys at these and other ocean disposal sites. The main purpose of the management plan is to provide a structured framework to ensure that dredged material disposal

activities will not unreasonably degrade or endanger human health, welfare, the marine environment, or economic potentialities (MPRSA 103 § [a]). It is the next step in the continuum of effective resource management that starts with the site designation process.

Another key aspect of the SMMP is the inherent flexibility to accommodate unforeseen needs and the associated ability to revise the plan, if necessary, as changes arise or needs are identified in the future. While the basic management and monitoring plan has been structured based on experience to date with these and other disposal sites, there is always the possibility that an unanticipated event or problem will arise that will require accommodations to this current framework. To this end, the SMMP will be reviewed periodically by EPA Region IX and the USACE Los Angeles District to discuss potential problems or address concerns of other state and federal regulatory agencies or of the public regarding disposal activities.

### ***3.2 Objectives***

The main objectives for management of all the southern California ocean disposal sites (LA-2, LA-3, and LA-5) are the same as for any other open-water disposal site:

- Protection of the marine environment,
- Beneficial use of dredged material whenever practical, and
- Documentation of disposal activities at the ODMDS.

EPA and USACE Los Angeles District personnel will achieve these objectives by jointly administering the following activities:

- Regulation and administration of ocean disposal permits,
- Ensuring suitability of dredged material for ocean discharge, through pre-dredge sediment evaluation,
- Project-specific compliance tracking of disposal operations,
- Evaluation of permit compliance and monitoring results,
- Implementation of a site monitoring program, and
- Periodic review of this SMMP.

### ***3.3 Site Management Roles & Responsibilities***

While EPA and the USACE work in coordination on all ODMDS in U.S. waters, they also have separate authorities over these sites. The roles and responsibilities for managing the three southern California ODMDS are outlined in Table 2 below.

**Table 2. Management Responsibilities**

<b>Site Management Task</b>	<b>Responsible Agency</b>
ODMDS Site Designation	EPA Region IX
Disposal Project Evaluation & Permit Issuance	USACE Los Angeles District <sup>1</sup> with EPA Region IX concurrence
Project-specific Compliance Tracking of Dredging and Disposal Operations	USACE Los Angeles District and EPA Region IX
Enforcement Actions for Violations Regarding Dredging Operations	USACE Los Angeles District (lead agency)
Enforcement Actions for Violations Regarding Disposal Operations	EPA Region IX
Disposal Site Monitoring	USACE Los Angeles District with periodic assistance from EPA Region IX
Pre-disposal sediment evaluation	USACE Los Angeles District and EPA Region IX

### **3.4 Funding**

Funds for past disposal site monitoring have been provided by the USACE Los Angeles District and EPA. Funding for future site monitoring will be provided by the USACE and other users; EPA will provide periodic funding and/or EPA research vessel for site monitoring.

## **4.0 Disposal Site Use Conditions and Practices**

All three southern California ODMDS have the same base, or generic, mandatory site use conditions. All users of any of the three disposal sites must comply with these conditions unless alternative conditions have been specifically approved in writing by EPA and USACE. In addition, EPA and USACE may apply additional, project-specific requirements for any project. It is the permittee’s responsibility to ensure that all personnel involved in approved dredging and disposal operations, including contractors and subcontractors, are aware of and comply with all required site use conditions and practices.

<sup>1</sup> Issued by either the Planning/Operations or Regulatory Branch of the USACE Los Angeles District, as appropriate

## 4.1 Mandatory Conditions

All permits or federal project authorizations for use of the LA-2, LA-3, or LA-5 ODMDS shall at a minimum include the following conditions, unless approval for an alternative permit condition is sought and granted pursuant to paragraph (C) of this section:

- 1) Dredged material shall not be leaked or spilled from disposal vessels during transit to the LA-2, LA-3, or LA-5 ODMDS. Transportation of dredged material to the approved ODMDS shall only be conducted when weather and sea state conditions will not interfere with safe transportation and will not create risk of spillage, leak, or other loss of dredged material during transit. No disposal vessel trips shall be initiated when the National Weather Service has issued a gale warning for local waters during the time period necessary to complete transportation and disposal operations.
- 2) Surface Disposal Zone (SDZ): When dredged material is discharged within the LA-2, LA-3, or LA-5 site, no portion of the vessel from which the materials are to be released (*e.g.*, hopper dredge or towed barge) shall be further than 1000 ft (305 m) from the center of the site designated in the permit. The center of the ODMDS (Table 1) is also the center of the SDZ for disposal:
- 3) No more than one disposal vessel may be within SDZ of any disposal site at any time.
- 4) The primary disposal tracking system for recording ocean disposal operations data shall be disposal vessel- (*e.g.*, scow-) based. An appropriate Global Positioning System (GPS) shall be used to indicate the position of the disposal vessel with a minimum accuracy of 10 feet during all transportation and disposal operations. This primary disposal tracking system must indicate and automatically record the position of the disposal vessel, the fore and aft draft of the disposal vessel, and the fore and aft height of material carried in the hopper or bin, at a maximum 1-minute interval while outside the disposal site boundary and at a maximum 15-second interval while inside the disposal site boundary. This system must also indicate and record the time and location of each disposal event (*e.g.*, the discharge phase). Finally, the primary system must include a real-time display, located in the wheelhouse or elsewhere for the helmsman, of the position of the disposal vessel relative to the boundaries of the disposal site and its SDZ, superimposed on the appropriate National Ocean Survey (NOS) chart so that the operator can confirm proper position within the SDZ before discharging the dredged material.
- 5) Data recorded from the primary disposal tracking system must be posted by a third-party contractor on a real time basis to a World Wide Web (Internet) site accessible at a minimum by EPA Region IX, the Los Angeles District USACE, the permittee, the prime dredging contractor, and any independent inspector. The Web site must be

searchable by disposal trip number and date, and at a minimum for each disposal trip it must provide:

- a visual display of the disposal vessel transit route to the disposal site;
- a visual display of the disposal phase (including beginning and ending locations) for each disposal event;
- the disposal vessel draft throughout transit and for at least 15 minutes following completion of the disposal phase;
- the estimated bin volume of material (sediment plus water) transported; and
- the name of the disposal vessel and tug as applicable

The requirement for posting this information on the Web is independent from the hard-copy reporting requirements listed in Special Condition 9, below. The third-party system must also generate and distribute “e-mail alerts” regarding any degree of apparent disposal outside the SDZ of the disposal site, and regarding any apparent substantial leakage/spillage or other loss of material en route to the disposal site. Substantial leakage/spillage or other loss shall be defined as an apparent net loss of draft of one foot or more between the time that the disposal vessel begins the trip to the disposal site and the time of the beginning of actual disposal. E-mail alerts for any disposal trip must be sent within 24 hours of the end of that trip, at a minimum to EPA Region IX, the Los Angeles District USACE, the permittee, and the prime-dredging contractor.

- 6) If the primary disposal tracking system fails during transit, the navigation system on the towing vessel (tug, if any), meeting the minimum accuracy requirement listed above, may be used to complete the disposal trip by maneuvering the towing vessel so that, given the compass heading and tow cable length to the scow (“lay back”), the estimated scow position would be within the SDZ (i.e., within 1,000 feet of the center of the disposal site). In such cases the towing vessel’s position, and the tow cable length and compass heading to the disposal vessel must be recorded and reported. Further disposal operations using a disposal vessel whose navigation tracking system fails must cease, until the primary disposal-tracking capabilities are restored.
- 7) The permittee shall complete an EPA- and USACE-approved Scow Certification Checklist that documents:
  - the amount of dredged material loaded into each barge or hopper for disposal;
  - the location from which the material in each barge was dredged;
  - the weather report and sea-state conditions anticipated during the transit period;
  - the time that each disposal vessel departs for, arrives at, and returns from the disposal site;
  - the exact coordinates and time of each disposal event; and
  - the volume of material disposed during each disposal trip.

The permittee’s proposed Scow Certification Checklist must be approved prior to the commencement of any ocean disposal operations.

- 8) The permittee shall report any anticipated, potential, or actual variances from compliance with these Mandatory Conditions, and any additional project-specific Special Conditions, to EPA Region IX and the Los Angeles District USACE within 24 hours of discovering such a situation. An operational “e-mail alert” system, as described in Special Condition 5 above, will be considered as fulfilling this 24-hour notification requirement. In addition, the permittee shall prepare and submit a detailed report of any such compliance problems with the monthly hard-copy reports described in Special Condition 9 below.
- 9) The permittee shall compile, for each ocean disposal trip, hard copy reproductions of the Scow Certification Checklist and printouts of the automatically-recorded electronic data from the primary disposal tracking system described in Condition 5.. These daily records shall be provided in reports to both EPA Region IX and the Los Angeles District USACE at a minimum for each month during which ocean disposal operations occur. The reports shall include a cover letter describing any problems complying with the Disposal Site Use Conditions specified for the project, including the cause(s) of the problems, any steps taken to rectify the problems, and whether the problems occurred on subsequent disposal trips. These reports shall also include the automatically recorded electronic navigation tracking and disposal vessel draft data on CD-ROM (or other media approved by EPA and USACE)..
- 10) No more than 60 days following completion of ocean disposal operations, the permittee shall submit to EPA Region IX and the Los Angeles District USACE a completion letter summarizing the total number of disposal trips and the overall (*in-situ* and bin) volume of material disposed by the project, and whether any of this dredged material was excavated from outside the areas authorized for ocean disposal or was dredged deeper than authorized by the permit. A post-dredge survey shall be provided with this completion letter.

## ***4.2 Project-Specific Conditions***

Permits or federal project authorizations authorizing use of LA-2, LA-3, or LA-5 may include additional conditions, if EPA or the USACE determines these conditions are necessary to facilitate safe use of the disposal site, the prevention of potential harm to the environment, or accurate monitoring of site use. These can include any conditions that EPA or the Corps of Engineers determine to be necessary or appropriate to facilitate compliance with the requirements of the MPRSA, such as timing of operations or methods of transportation and disposal.

### ***4.3 Alternative Permit/Project Conditions***

Alternatives to the permit conditions specified in this section in a permit or federal project authorization may be authorized if the permittee demonstrates to the District Engineer and the Regional Administrator that the alternative conditions are sufficient to accomplish the specific intended purpose of the permit condition in issue and further demonstrates that the alternative condition(s) will not increase the risk of harm to the environment, the health or safety of persons, nor will impede monitoring of compliance with the MPRSA, regulations promulgated under the MPRSA, or any permit issued under the MPRSA.

### ***4.4 Anticipated Site Use Duration***

The LA-2, LA-3, and LA-5 sites are permanently-designated sites in deep water (360 – 1475 feet) where accumulation of material is not expected to ever become a navigation hazard; therefore, no specific closure is specified for any of these sites at this time.

### ***4.5 Review and Revision of the SMMP***

Because dredged material has been disposed at these sites for almost 3 decades with no unreasonable or significant impacts to the marine environment, EPA and USACE are reasonably confident that the important site management and monitoring requirements are known and included in this document. However, in the event that unanticipated problems or events occur, modifications to the management or monitoring plan will be proposed jointly by EPA Region IX and USACE Los Angeles District. If significant modifications are proposed, a revised draft SMMP would be published, and opportunity for public comment provided. In any event, this SMMP will be reviewed (and revised if necessary) at intervals not to exceed 10-year intervals. Public comment will be sought during each review.

## **5.0 Site Monitoring Plan**

Site monitoring is a requirement for all of the southern California disposal sites. Routine monitoring surveys (described below) at each site will occur at least every 5 years, or more frequently if determined necessary by EPA

The primary purpose of the routine site monitoring surveys is to verify the predictions made in the respective FEISs regarding site conditions following disposal. Simply stated, these predictions are that: a) pre-dredge evaluation has ensured that only suitable dredged material has been deposited at the site, b) there are no significant contaminant-related biological effects on site or off site, and c) there are no significant physical effects from material deposited off site. A summary of how these predictions are addressed in the tiered site monitoring plan (described in detail in the sections to follow) is presented in Table 3.

Dredged material that is suitable for ocean disposal under the 1991 Green Book guidelines is expected to cause acceptable impacts within the disposal site. These include burial of any onsite benthic communities and potentially some chronic, sub-lethal biological effects to any onsite fauna from associated chemicals of concern in the disposed sediments. Partial recolonization will occur within the site, but full recovery of the benthic community the designated boundary of LA-2 or LA-3 is not expected during active use of either site, because continued disposal operations will tend to bury any recolonizing fauna. Full recolonization of the site with no long-term associated environmental impact would be expected if either site is ever closed in the future and disposal is discontinued.

**Table 3**  
**A Summary of the Tiered Disposal Site Monitoring Design**

Monitoring Tier	Monitoring Focus			Trigger Level to Initiate Next Tier or Management Action
	a. Only suitable material disposed at site	b. No significant contaminant effects	c. No significant physical effects off site	
1	✓	✓	✓	Sediment chemistry elevated above disposal or historical values, or significant material deposition outside site
2	✓	✓	✓	Material fails bioeffects testing, or anomalous recolonization pattern outside site
3	✓	✓	✓	Management action to be determined by regulatory agencies

Two types of monitoring will be carried out at the LA2/LA3 disposal sites: routine compliance monitoring as part of ongoing disposal projects, and periodic tiered disposal site monitoring (Figure 1). The routine project compliance monitoring that provides the necessary feedback for on-going disposal site management are those tasks outlined in Section 2.3 above that are carried out by the permittee. Compliance monitoring results consist of completed post-cruise scow log sheets, inspection reports, records of transport and disposal activities, *etc.*, as specified in each issued permit. If any of these reports show serious discrepancies (e.g., known permit violations for disposal scow conditions, awareness of misplaced dredged material as a result of permittee disposal reports), the resulting management actions can include fines or additional monitoring activities carried out by the permittee at the disposal site as specified by either USACE Los Angeles District or EPA Region IX.

The periodic disposal site tiered disposal site monitoring consists of a hierarchical series of sampling tasks that will provide a comprehensive assessment of current conditions at each site to be compared against baseline conditions. Baseline conditions at both sites are documented in EPA Region IX's FEIS for the LA-3 site designation action, and this document summarizes all

the data from the multiple previous surveys performed at these two sites. These documents will be used, along with reference data, to evaluate future changes to each site. In addition, all sediment testing results for dredged material characterization projects will be entered into the regional sediment quality database being assembled by the Los Angeles Contaminated Sediment Task Force (CSTF; see <http://www.coastal.ca.gov/web/sediment/sdindex.html> and [www.sccwrp.org](http://www.sccwrp.org)) for comparison with results from sediment grabs at the disposal site as part of compliance monitoring.

As part of the tiered site monitoring program described in this section, EPA Region IX and USACE Los Angeles District will determine if there are any detectable significant impacts to the following areas, based on monitoring physical, chemical, and biological parameters:

1. Inside the ODMDS boundary
2. Over an area adjacent to the ODMDS boundary if monitoring shows that significant accumulations of dredged material (> 15 cm [5.9 inches]) are outside the site boundary or that adverse bioeffects are occurring inside the site. [NOTE: This is an extremely conservative trigger level that will have little or no adverse effects on the benthic infauna; details to follow in Section 3.1.1 below].

The monitoring plan includes the on-going compliance monitoring as well as two interdependent lines of monitoring: a Physical/Biological monitoring module and a Chemical/Bioeffects monitoring module (Figure 1). Each type of monitoring is “tiered” to insure that information is collected in a cost-effective manner and limited resources are not wasted. This program facilitates monitoring of both short-term (dredged material is largely confined within site boundaries as modeling studies predict; see Chapter 4 of FEIS) and long-term (recolonization and bioeffects testing) conditions, enabling both EPA Region IX and the USACE Los Angeles

**Figure1B&W**

District to make management decisions in a timely manner should potential unacceptable impacts be discovered. The physical, biological, and chemical monitoring also will help these agencies verify whether disposal operations are being carried out in compliance with permit requirements and environmental regulations.

A wide variety of past studies at both sites have shown that water column effects are transient and impacts to most components of the biological environment (plankton, epifauna, fish, birds, mammals, threatened or endangered species) and socioeconomic environment (commercial/recreational fisheries, shipping, military usage, oil and natural gas development) are rated as a Class III impact (adverse but insignificant or no anticipated impacts; no mitigation measures are necessary; see Chapter 4 of FEIS). Long-term dredged material monitoring programs on the east-coast (Disposal Area Monitoring System, or DAMOS, run by the USACE New England District since 1979) and west coast (Puget Sound Dredged Disposal Analysis, PSSDA, run by the USACE Seattle District since 1986; SF-DODS monitoring, run by the USACE San Francisco District since 1996 and periodic monitoring conducted by EPA Region IX) have demonstrated that monitoring resources are better allocated toward measuring impacts that are not transient, i.e. persist on time scales that are greater than those occurring in the range of hours to days. As such, the planned sampling efforts for both the LA-2 and LA-3 sites are focused on the seafloor and fulfill the needs for both compliance sampling (Tier 1) and impact assessment (Tiers 2 and 3).

Readers will note that all 3 tiers of the Physical/Biological Module will be carried out during the same initial monitoring cruise on which the sediments for the Tier 1 on-site chemistry are collected for the Chemical/Bioeffects Module. Sufficient sediment for potential Tier 2 activities under the Chemical/Bioeffects Module should be collected during the initial cruise in the event that bulk chemistry analyses reveals the need for acute or chronic bioeffects testing. Only Tier 3 activities under the Chemical/Bioeffects Module would potentially require an additional monitoring cruise to the disposal site unless sufficient sediment for Tier 2 activities is not collected during the initial cruise or if sediment holding times are violated by the time that the Tier 2 bioassay/bioaccumulation tests are scheduled to begin.

### ***3.1 Physical/Biological Module***

The monitoring for physical/biological processes is focused on the potential transport of dredged material out of the site boundaries following disposal and the recolonization of dredged material by benthic infauna. A site-specific numerical model was run for predictions of transport and fate of dredged material disposed at both LA-2 and LA-3 (CE, 2004; see Chapter 4, FEIS for summary of results), and no substantial accumulations are expected outside the site boundary; the physical portion of the module focuses on mapping and tracking the dredged material deposit on the seafloor to verify the predictions of the numerical model. If material is found outside the

site in accumulations thicker than expected, biological monitoring will be performed to document that infaunal recolonization is proceeding as expected.

### 3.1.1 Tier 1 Physical Monitoring

*Tier 1 Physical Monitoring shall primarily consist of a sediment vertical profiling system (SVPS) survey of transects radiating out from the disposal site boundary to map any dredged material outside the site boundary. Also, periodic high-resolution multibeam surveys will be performed when the equipment is available to map the topography and distribution of dredged material deposits within the disposal site boundaries. Such a survey will be performed using a multibeam system with similar frequency and beam width as the baseline surveys (Gardner 2000) so that data can be overlain and "depth difference" maps produced to show the spatial extent and thickness of the disposed dredged material within the site.*

Physical monitoring activities, including field measurement and data analysis, focus on the question: Is a substantial (> 15 cm [5.9 inches]) accumulation of dredged material occurring outside of the disposal site boundaries?

A series of radial transects starting at the edge of the site and continuing out 500 meters beyond the edge of the detectable dredged material layer will be sampled with SVPS technology. SVPS stations will be placed at 200–500 m (655–1640 ft) intervals along the transects or at appropriate spacing so that any area outside the site boundary with dredged material has at least 3–5 stations located on the dredged material. The SVPS system must be equipped with a digital camera to allow on-board evaluation of results (necessary for assessing the adequacy of station locations for mapping the dredged material and for Tier 2 activities; see below).

The SMMP is designed to ensure that significant deposits of dredged material do not consistently occur or extend beyond the site boundaries. A substantial deposit is defined as 15 cm (5.9 inches) or more since the last monitoring event (thicker deposits are expected to occur and are acceptable within the site boundaries). Physical mapping of the dredged material footprint on the seafloor will be conducted at periodic intervals in order to confirm that management guidelines for disposal operations are operating within expected criteria and the predictions from the numerical models are correct.

Although the 30 cm (12 inches) depositional interval is used as a conservative impact threshold for computer modeling purposes (see Chapter 4 of the FEIS, Figures 4.2-1, 4.2-2, 4.3-1, 4.4-1, and 4.4-2), the 15-cm (5.9-inch) depositional interval of dredged material outside the site boundary has been selected as a trigger level to proceed to Tier 2 for a number of reasons:

1. The maximum depositional interval that can be detected by the SVPS equipment is 20 cm (7.9 inches), but the camera settings are usually adjusted so that actual prism penetration

is somewhat less than that (12–19 cm; 4.7–7.5 inches) in order to capture details at the sediment-water interface.

2. Impacts to infauna from deposition of dredged material can range from negligible to total mortality, depending on the type of material and rate of deposition (a 50-cm [19.7-inch] layer deposited at the rate of 1 cm (0.4 inch) per week over the course of a year would have little detectable impact as compared with a 50-cm [19.7-inch] layer that occurred at a location in one depositional event). Estimates of depositional intervals through which native infauna can re-establish themselves range from 5 cm (2 inches) to 85 cm (33.5 inches) (Kranz, 1974; Nichols et al., 1978; Maurer et al., 1980, 1986).
3. Repeated monitoring at the LA-2 and LA-3 sites (see FEIS) as well as at other open-water dredged material sites off all coasts of the USA (e.g., Rhoads and Germano, 1986; Germano et al., 1994; Hall, 1994; Newell et al., 1998) have shown that even in dredged material deposits exceeding a meter or more (where one can safely assume that all resident infauna were smothered and killed), benthic recolonization and community succession will occur with full ecosystem recovery over time, so any impact to the benthic community from deposition of dredged material that has passed testing criteria as acceptable for open-water disposal will be temporary. Using 15 cm (5.9 inches) as trigger level is an extremely conservative value; while this will most likely have little, if any, adverse effects on the benthic infauna, it will be a good verification check for the disposal model's predicted footprint of dredged material on the seafloor.

During the years when the optional physical monitoring (multibeam survey) is performed, it should be done as the first phase of Tier 1 sampling before any further Tier 1 monitoring (SVPS and sediment grabs/box cores). This phased approach will not cause any increase in costs; while some post-cruise time to process the multibeam data and perform the depth-difference analysis would be needed regardless, these two types of surveys would typically be done on two different cruises (or vessels) either to maximize efficiency in ship equipment configuration or personnel utilization. The depth difference results from the multibeam survey would provide useful ancillary information to show areas a) where dredged material has gone outside the boundary to help direct the transects for SVPS sampling and b) where the dredged material accumulations are within the site boundary in order to confirm the location of sediment sampling stations. Note that the depth resolution of the currently-available multibeam equipment is 30 cm (11.8 inches), so any detected depositional layers less than this thickness are most likely sampling artifacts.

### **3.1.2 Tier 2 Physical/Biological Monitoring**

*Tier 2 Physical monitoring will consist of an on-board evaluation by trained personnel in SVPS image interpretation to determine if benthic recolonization is occurring as predicted to verify that the sediment outside the site is not causing an adverse impact; a*

*subsequent detailed image analysis will be performed back in the laboratory, but the on-board evaluation will determine if Tier 3 sediment sampling is required.*

Having some dredged material beyond the site boundary is not considered an adverse impact unless the sediment quality is compromised to the point where it is impairing biological recovery; as such, the assessment of infaunal successional status serves as a surrogate for an *in-situ* bioassay of sorts. Using infaunal successional status as determined from sediment profile image interpretation as an indication of dredged material disposal impact has been a successful monitoring strategy for dredged material disposal under the DAMOS program for over two decades; this streamlined approach has been cited by the National Research Council as one that “has successfully addressed most important questions related to dredged material disposal” (NRC, 1990). Experienced scientists can readily assess benthic recolonization from determining the successional stage of the infaunal community based on the information in sediment profile images (Rhoads and Germano, 1982, 1986). The images will be downloaded from the camera after the stations have been sampled and the infaunal successional status of each location determined.

Numerous studies have shown that organism-sediment interactions in fine-grained sediments follow a predictable sequence after a major seafloor perturbation. This theory states that primary succession results in “the predictable appearance of macrobenthic invertebrates belonging to specific functional types following a benthic disturbance. These invertebrates interact with sediment in specific ways. Because functional types are the biological units of interest..., our definition does not demand a sequential appearance of particular invertebrate species or genera” (Rhoads and Boyer 1982). This theory is presented in Pearson and Rosenberg (1978) and further developed in Rhoads and Germano (1982) and Rhoads and Boyer (1982).

This continuum of change in animal communities after a disturbance (primary succession) has been divided subjectively into three stages: Stage I is the initial community of tiny, densely populated polychaete assemblages; Stage II is the start of the transition to head-down deposit feeders; and Stage III is the mature, equilibrium community of deep-dwelling, head-down deposit feeders (Figure 2).

After an area of bottom is disturbed by natural or anthropogenic events, the first invertebrate assemblage (Stage I) appears within days after the disturbance. Stage I consists of assemblages of tiny tube-dwelling marine polychaetes that reach population densities of  $10^4$  to  $10^6$  individuals per  $m^2$ . These animals feed at or near the sediment-water interface and physically stabilize or bind the sediment surface by producing a mucous “glue” that they use to build their tubes.

*If there are no repeated disturbances to the newly colonized area, these initial tube-dwelling suspension or surface-deposit feeding taxa are followed by burrowing, head-down deposit-feeders that rework the sediment deeper and deeper over time and mix oxygen from the overlying water into the sediment. Stage II is the beginning of the transition to burrowing, head-down deposit feeders that rework the sediment deeper with time and mix oxygen from the overlying*

**Figure2B&W**

*water into the sediment. Stage II animals may include tubicolous amphipods, polychaetes, and mollusks. These animals are larger and have lower population densities than Stage I animals.*

Stage III is the mature and stable community of deep-dwelling, head-down deposit feeders. In contrast to Stage I organisms, these animals rework the sediments to depths of 3 to 20 cm or more, loosening the sedimentary fabric and increasing the water content of the sediment. They also actively recycle nutrients because of the high exchange rate with the overlying water resulting from their burrowing and feeding activities. The presence of Stage III taxa can be a good indication that the sediment surrounding these organisms has not been severely disturbed recently. Because Stage III species tend to have relatively low rates of recruitment and ontogenetic growth, they may not reappear for several years once they are excluded from an area. These inferences are based on past work, primarily in temperate latitudes, showing that Stage III species are relatively intolerant to physical disturbance, organic enrichment, and chemical contamination of sediments. Population densities are low (10 to 10<sup>2</sup> individuals per m<sup>2</sup>) compared to Stage I.

We would predict that by the time monitoring takes place, the benthic community should be in at least a transitional Stage I going to Stage II community or later. The surface oxidized layer of sediment would be at least 1–1.5 cm thick, and the subsurface sediments would not show signs of organic enrichment. If the sediment profile images reveal locations with low reflectance subsurface sediments or oxidized surface layers less than 0.3 cm (0.1 inches) thick with little to no evidence of infaunal activity, then Tier 3 sampling will be initiated.

### **3.1.3 Tier 3 Physical/Biological Monitoring**

*Tier 3 Monitoring will be a chemical evaluation of the offsite dredged material layer and will consist of taking a minimum of 5 sediment samples in those areas determined from the SVPS image analysis to have impaired benthic recolonization. Samples will be appropriately stored and returned to an on-shore laboratory for chemical analysis and will follow the same evaluation hierarchy as detailed for onsite sediments starting in Tier 1 of the Chemical/Bioeffects Module (see Figure 1).*

If the results from the Tier 2 analysis of the SVPS images show impaired recolonization and there is knowledge that the sediments from the area of concern have not been placed at the site very recently (within the past week), then there is a chance that these sediments may have chemical concentrations that are preventing successful recruitment and reestablishment of the benthic community. In order to determine whether or not the delay in benthic recolonization/recovery is due to chemical vs. physical (disposal, trawling, etc.) or biological (competition, predation) disturbance, at least five sediment grab samples will be taken in the area of concern for bulk sediment chemistry analysis. The evaluation pathway will be the same as the one followed for on-site sediments (see next section).

## **3.2 Chemical/Bioeffects Module**

Chemical/bioeffects monitoring focuses on the effects of dredged material deposition on the chemical characteristics of sediments within (and potentially adjacent to) the LA-2 or LA-3 disposal sites and potential effects of biological uptake of contaminants associated with the sediments. Routine monitoring of selected chemical constituents will be performed as part of compliance monitoring (to insure that adequate sediment characterization has been accomplished through the permitting process) and also as a conservative measure to evaluate the long-term potential for acute and chronic bioeffects from sediment contaminants. Two key components of evaluating the results from this module will be the Ocean Disposal Database maintained by the USACE Los Angeles District as well as the CSTF Sediment Quality Database; there will be a wealth of historical information in the latter database, not only on historical data collected from the site, but also on the chemical concentrations of sediments approved for disposal from the dredged material permitting process. As such, it will be important for both the USACE Los Angeles District or EPA Region IX to maintain the database and keep the information current so that comparisons with bulk sediment chemistry results from disposal site sampling will be accurate and reflect the most current information.

Sediments with highly elevated or toxic concentrations of chemical contaminants should not be disposed of at either the LA-2 or LA-3 sites; extensive pre-disposal testing and evaluation is used to identify sediments that meet the stringent ocean disposal criteria (EPA/USACE 1991). This sediment testing required as part of the permit processing should identify and exclude from ocean disposal any sediments that are toxic or pose an unacceptable risk of bioaccumulation to the marine environment. However, the SMMP recognizes that occasionally some small volumes of unsuitable material may be missed in the pre-dredging characterization studies, or that unintentional disposal of some excluded material could potentially occur in rare occasions. Direct chemical monitoring of the deposited sediments within the disposal site will accurately reflect the concentrations of material available to biological receptors as a back-up verification/validation of the permit characterization process. This ensures that decisions about the need for Management Action as described in Section 4 are based on more accurate knowledge about actual site conditions.

### **3.2.1 Tier 1 Onsite Chemical Monitoring**

*Tier 1 chemical monitoring shall consist of collecting, processing, and storing grab samples of surface sediments from at least 10 stations randomly located on the dredged material deposit (as determined from disposal location records, multibeam, or SVPS results) that will be analyzed for chemicals of concern and evaluated against known historical sediment chemistry values from both past disposal site surveys and dredged material characterization studies.*

Tier 1 chemical monitoring is designed to address the following question: Do concentrations of chemicals of concern in dredged material actually deposited at either LA-2 or LA-3 significantly exceed the range of concentrations in the dredged material either already at the site or pre-approved by the EPA and USACE for disposal at the site?

Sediment samples will be collected at a minimum of 10 stations and analyzed for grain-size properties, total organic carbon (TOC), and, at a minimum, the suite of trace metals, chlorinated pesticides, polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons (PAH), and other organic compounds/classes listed as part of the regional guidance for dredged material permit characterization. Compound- and metal-specific detection limits and other quality control requirements must be consistent with this regional guidance. Additional analytes may be added if information from bulk chemical characterizations of the material approved for disposal at LA-2 or LA-3 indicates a potential for cumulative effects in the disposal site sediments.

The top 10 cm (3.9 inches) of surface sediments will be removed from an acceptable grab or box core for chemical analysis. An acceptable grab or box core is one where:

- the sampler is not overfilled, which could be indicative of sample loss;
- overlying water is present indicating sample integrity;
- the sediment surface appears to be relatively undisturbed; and
- the desired sample depth has been achieved (ideally, at least 1 or 2 cm [0.4 – 0.8 inches] should remain at the bottom of the sampler after the upper layer has been subsampled).

If sample acceptability criteria are met, overlying water will be carefully siphoned off (if the water is turbid, it could be allowed to settle out for a short period). In order to remove sediments from the grab or box core for chemical analyses, a sample aliquot will be collected to the appropriate sediment depth (10 cm; 3.9 inches) and placed either in the appropriate sample jar or in a mixing container, such as a stainless steel bowl. It is recommended that sample aliquots be collected from the grab or box core with stainless steel utensils such as spoons, spatulas, or flat-bottomed hand trowels, although Teflon implements may be substituted. Sufficient sediment shall be collected for immediate post-cruise bulk chemical analyses as well as enough for potential bioassay/bioaccumulation tests, should they need to be performed later. This would also require collecting and archiving sediment from the site reference stations for later bioassay/bioaccumulation tests, should they need to be run.

Trigger levels that would initiate proceeding to Tier 2 evaluations (requiring testing of the remaining archived sediment from the initial cruise) would not be determined by comparing disposal site sediment chemistry results to reference site results (we would expect these to be different), but rather to existing site historical concentrations and concentrations of sediments permitted to go to the site. This would be done by multiple comparisons of site monitoring results to the recent (since the last monitoring event) pre-disposal testing concentration ranges (approved for ocean disposal) as well as a tolerance interval based on historical data. The

tolerance interval would be constructed on the historical data to contain at least 80 percent of the population of background (historical) data with 95-percent confidence. The exact distribution of the historical data is unknown, so the tolerance interval is a random interval; that is, the tolerance bounds are random variables computed from the sample statistics derived from the observed historical data. A beta-content upper tolerance bound with 80-percent coverage and 95-percent confidence indicates that we have 95-percent confidence that 80 percent of the population will be less than the tolerance bound. If any of the disposal site samples exceed both the pre-disposal concentration ranges and this tolerance bound, we conclude that they are different from the historical population and warrant further investigation, as described in Tier 2 or Tier 3 monitoring. If concentrations are not elevated compared to these ranges, then no further chemical/bioeffects monitoring or Management Action is required. Because trigger levels will be derived from measurements taken for specific projects that have disposed material at either ODMDS up to the time of the monitoring event, these values (trigger levels) are expected to change on a year-to-year basis. Consequently, a table of specific trigger levels is not provided in this SMMP; the site monitoring reports, published separately, will report the trigger levels used for comparison during the period being covered.

### **3.2.2 Tier 2 Onsite Chemical/Bioeffects Monitoring**

*Tier 2 Chemical/Bioeffects monitoring shall consist of first evaluating the elevated chemical concentrations to see if they represent bioaccumulative compounds of concern (BCOCs). If BCOCs exceed pre-disposal testing concentration ranges, then sediments from both the dredged material layer as well as the ODMDS reference station(s) will be evaluated with bioaccumulation tests; if they do not, then sediments from both the dredged material layer as well as the ODMDS reference station(s) will be evaluated with acute toxicity testing.*

Tier 2 chemical/bioeffects monitoring addresses the following question: Do the elevated chemical concentrations represent bioavailable contaminants that will adversely affect the marine environment?

Sediments collected during the Tier 1 activities should be stored at 4° C for up to 6 weeks in the event that acute or chronic bioeffects testing needs to be performed. If sufficient sediment for bioassay/bioaccumulation testing is not collected during the initial survey cruise or if there is a chance that holding times will be violated because of delays in laboratory scheduling for the Tier 1 analyses, then it will be necessary for EPA Region IX as part of their management strategy to shift the target of any ongoing disposal operations to another location within the site boundary so that that sediments characterized during Tier 1 are still available for Tier 2 evaluation and not covered by new material being placed at the site. Sufficient sediments would then have to be collected at areas of concern and the reference station(s) for either bioassay or bioaccumulation testing according to regional guidance and Green Book protocols.

If BCOCs are not present at elevated concentrations and the sediments pass the bioassay tests, while no Management Actions are required, a review of the management implications, *e.g.*, dredged material characterization permitting procedures or tolerance intervals of the historical database for Tier 1 evaluations, will be warranted given the desire to reduce the number of false positive triggers in future monitoring events. If the sediments fail the bioassay tests, then EPA Region IX and USACE Los Angeles District personnel will either require Tier 3 additional offsite investigations or need to implement the appropriate Management Actions (Section 4).

If BCOCs are present at elevated concentrations, either the remaining archived sediment from the initial Tier1 survey or newly collected sediments will be subjected to bioaccumulation testing according to regional guidance and Green Book protocols. If the sediments fail the bioaccumulation tests, then EPA Region IX and USACE Los Angeles District personnel will either require Tier 3 additional offsite investigations or need to implement the appropriate Management Actions (Section 4).

### **3.2.3 Tier 3 Offsite Monitoring**

*Tier 3 offsite monitoring and/or management activities shall be determined by EPA Region IX and USACE Los Angeles District personnel based on which results caused initiation of this level of activity.*

Tier 3 offsite monitoring addresses the following question: Do the adverse effects discovered within the disposal site affect any resources of concern outside the site?

Depending on the nature and extent of the adverse effects detected within the site, additional sampling outside the disposal site may or may not be required. For example, if sediments from just one or a few of the 10 locations sampled during Tier 1 activities showed adverse biological effects, regulatory personnel may determine that a management action such as directing future disposal activities to the area of concern would alleviate the problem by covering the affected sediment with a new layer of dredged material and effectively removing the source of exposure for any biological receptors. However, the concern for adverse impacts to biological resources may extend outside the site to either benthic invertebrates or higher trophic levels, and additional sampling activities may be required, such as:

- collection of benthic invertebrates outside the site to determine, if they have elevated tissue concentrations of contaminants of concern compared to organisms found at reference areas;
- collection of demersal fish species in the vicinity of the disposal site to determine, if they have elevated tissue concentrations of contaminants of concern;
- grabs or box cores for detailed benthic community analyses to determine, if there are population-level impacts from elevated chemical concentrations (Gray, 1979; Ferraro and Cole, 1997; Oug et al., 1998; Stark, 1998; Trannuma et al., 2004); and

- additional SVPS sampling to determine the nature and extent of gradients in sediment oxygen demand, organic loading, sediment type, or benthic population structure.

The precise design of the sampling program, including the location of organism collection sites, would be determined by the area of potential impact as defined in the monitoring tasks which led to this tier as well as the distribution of the dredged material footprint as determined by the Physical Monitoring module.

## 4.0 Management Actions

As shown in Figure 1, the results of any monitoring task that drop down to Tier 2 or 3 cause either a review of management implications or a management action. The review of management implications (triggered by either disposed material outside the site boundary in excess of 15 cm [5.9 inches] or bulk sediment chemistry values greater than pre-disposal test concentration ranges or the tolerance interval calculated from the historical data base) could mean one or more of the following problems exist:

- Control of disposal operations is not occurring as planned;
- Numerical modeling predictions are inaccurate (site boundary may be too small);
- Inadequate characterization of dredged material during the permitting process (material is either more heterogeneous than anticipated or sampling density for characterizing a specified volume is too low);
- The tolerance envelope calculated from the historical data is too narrow and needs to be expanded; or
- The tolerance envelope needs to be recalculated with different weighting factors applied to historical sampling data from the disposal site vs. permit characterization data (the two sources of data are not equivalent with respect to characterizing the mean and variability of contaminant concentrations on the disposal mound).

Depending on which path leads to the “Review Management Implications” box in Figure 1, further investigations would identify which of the above problems is most likely the cause of the false positive trigger and allow correction once EPA Region IX and USACE Los Angeles District personnel concur on the proper remedy and adjustment to the management plan. However, each agency is free to operate solely under its own authority as outlined in Table 1.

If, however, it is determined that the potential for risk to human health or the marine environment exists because of bioavailable contaminants being placed at the site, the potential management actions include any or all of the following actions:

- Review and revise the sediment characterization process as part of permit activity;

- Suspend or modify any further use of the site while the cause of the problem is being identified;
- Cap the affected area with a sufficient volume of clean sediments to ensure the bioavailable contaminants are permanently isolated from any biological receptors;
- Identify additional monitoring tasks that must be performed to better identify or delineate the source of the problem; and
- Permanently terminate use of the site, if this is the only means for eliminating the adverse environmental impacts

In general, any management action would be initiated only after consensus has been reached between EPA Region IX and USACE Los Angeles District. EPA and the USACE still retain their respective authority over the disposal site and dredging site, and may exercise their independent authority (i.e., enforcement) if appropriate and necessary for environmental protection in either area. Any changes to the SMMP will be published by EPA.

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**Exhibit 5**



425 S. Palms Verdes Street Post Office Box 151 San Pedro, CA 90733-0151 TEL/TDD 310 SEA-PORT [www.portoflosangeles.org](http://www.portoflosangeles.org)

Eric Garcetti Mayor, City of Los Angeles  
Board of Harbor Commissioners Ambassador Vilma S. Martinez David Aron Patricia Castellanos Anthony Prozzi, Jr. Edward R. Renwick  
Eugene D. Seroka Executive Director Vice President

December 2, 2014

Sam Unger, Executive Officer  
Los Angeles Regional Water Quality Control Board  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

ATTN: Mr. Sam Unger, P.E.

**SUBJECT: PORT OF LOS ANGELES – BERTHS 212-224 REDEVELOPMENT  
TENTATIVE WASTE DISCHARGE REQUIREMENTS (FILE NO. 14-097)**

The Port of Los Angeles (POLA) is currently in the design phase of a redevelopment project at Yusen Terminal Inc. (YTI), located at 701 N. Dock Street, San Pedro, California. The redevelopment project includes dredging at Berths 214-216 and Berths 217-220, the installation of sheet piles to accommodate deepening, surface improvements to the backland, and expansion of the existing on-dock rail yard (see Exhibit 1). The project will allow YTI to remain competitive by berthing larger container vessels.

POLA submitted a permit application to the Regional Board on June 10, 2014 for the disposal of approximately 27,000 cubic yards of sediment from Berths 214-220. In June 2013, POLA performed a sediment characterization study at Berths 214-216 and Berths 217-220. Sediment testing was conducted according to guidelines set forth in the U.S. Environmental Protection Agency (USEPA) and the U.S. Army Corps of Engineers (USACE) Evaluation of Dredged Material Proposed for Ocean Disposal: Testing Manual. Both the initial sampling and analysis plan and the final sediment report were reviewed and approved by the Los Angeles Region Contaminated Sediment Task Force (CSTF). The sediment report provided results on grain size determinations, chemical analyses, toxicity testing, and bioaccumulation testing. There was unanimous concurrence by the CSTF agencies that the top two feet of material at Berths 214-216 were not suitable for open ocean disposal at the approved LA-2 Ocean Dredged Material Disposal Site, but that the remaining material from Berths 214-216, as well as all of the material from Berths 217-220, is suitable for LA-2 disposal. Therefore, the Port is requesting approximately 5,200 cubic yards of unsuitable sediment to be disposed of at POLA's Berths 243-245 Confined Disposal Facility (CDF), and the remaining 21,800 cubic yards be disposed of at LA-2.

In accordance with the CSTF Long-Term Management Strategy and the Port's internal Sediment Management Guidance, POLA evaluated all reasonable alternative options to ocean disposal, such as beneficial reuse and other disposal locations, and concluded the following:

- The results from the sediment characterization study indicate a fine grain size not suitable for beach replenishment
- POLA has no landfills currently in construction
- POLA does not have any current or planned construction projects that can use this material

As such, POLA is respectfully requesting the approval of the Tentative Waste Discharge Requirements for the Berths 212-224 Redevelopment project.

Sincerely,



MICHAEL R. CHRISTENSEN, P.E.  
Deputy Executive Director

EH:dke  
25198 1-2-2  
25198c36

Attachment: 1) Exhibit 1

EXISTING WHARF TO REMAIN = 100'± (DEPTH = -45')

1400' OPERATIONAL WHARF UPGRADE  
(-53' DEPTH WITH UNDERWATER BULKHEAD)

APM Triple E Class Loading Berms

Note: Triple E Vessel Brown for information purposes only.

EXISTING 100' GAUGE CRANE RAIL

EXISTING ANGLE POINT

ADDITIONAL LOADING TRACK  
(2900 FEET)

1200' OPERATIONAL UPGRADE  
NEW LANDSIDE GIRDER W/ TIE-BEAM  
(-47' DEPTH)

209'

50'



200' 100' 0' 200' 400'

**PRELIMINARY**  
11/18/14

DATE	DRAWN	REVISIONS	DATE	NO.	DESCRIPTIONS	CHK'D	APP'D	CHK'D	APP'D	SCORE	CHECKS	DESIGNED	ENGR/ARCH	CHIEF OF DESIGN	ASST. CHIEF	REGISTERED	ENGINEER	EXHIBIT NUMBER	
																			EXHIBIT 1

**BERTHS 214-220 REDEVELOPMENT PROGRAM**

**LA** THE PORT OF LOS ANGELES  
**ENGINEERING DIVISION**  
425 N. PALMS EXHIBITS STREET SAN PEDRO, CA 90731-3289

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