

## Los Angeles Regional Water Quality Control Board

June 6, 2014

Christopher Cannon  
Director of Environmental Management  
Port of Los Angeles  
425 S. Palos Verdes Street  
San Pedro, CA 90371

Heather A. Tomley  
Director of Environmental Planning  
Port of Long Beach  
925 Harbor Plaza  
Port of Long Beach, CA 90802

### **GREATER HARBOR WATERS REGIONAL MONITORING COALITION'S COORDINATED COMPLIANCE, MONITORING, AND REPORTING PLAN**

Dear Mr. Cannon and Ms. Tomley:

The Los Angeles Regional Water Quality Control Board (Regional Board) received the Greater Harbor Waters Regional Monitoring Coalition's Coordinated Compliance and Reporting Plan (CCMRP) on June 24, 2013. The draft CCMRP was submitted to the Regional Board by the Port of Los Angeles and the Port of Long Beach on behalf of the Regional Monitoring Coalition (RMC). The draft CCMRP was posted on our website at:

[http://www.waterboards.ca.gov/losangeles/board\\_decisions/basin\\_plan\\_amendments/technical\\_documents/bpa\\_66\\_R11-008\\_td.shtml](http://www.waterboards.ca.gov/losangeles/board_decisions/basin_plan_amendments/technical_documents/bpa_66_R11-008_td.shtml) for public review on September 23, 2013. Regional Board received a total of 4 comment letters (Attachment 1) from U.S. EPA, Heal the Bay, Western States Petroleum Association, and Joyce Dillard. Regional Board staff reviewed and provided comments to the Port of Los Angeles and Port of Long Beach (Ports) on November 7, 2013, and held a meeting on November 8, 2013 to discuss the comments.

The CCMRP was revised and resubmitted to the Regional Board on February 26, 2014 together with response to comments table (Attachment 2). Regional Board staff reviewed the revised CCMRP and agreed with approach outlined in the response to comments table and the revisions with one exception. The response to comment No. 1 did not address the concern regarding selection of representative sampling locations. On April 1, 2014, Regional Board staff met with Port staff to discuss representative sampling locations. At the meeting, Regional Board staff reiterated the sediment sampling station should be selected to represent the overall condition of each water body and recommended that sediment sampling stations should be rotated among different locations instead of located at the center of point for each water body.

On April 21, 2014, the Ports, on behalf of the RMC, confirmed that sediment sampling stations will be drawn randomly for monitoring events that are not coordinated with the Bight Program

(Attachment 3). Random selection will be conducted by a method similar to the method used by SCCWRP for selecting Bight Program stations. One randomly selected sampling station will be located in each of the 22 specified sampling location areas listed in the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL. Detail on how the sampling stations will be randomly selected is described in Attachment 3.

Regional Board staff has reviewed and agrees with the responses and approach proposed by the Ports. The Executive Officer hereby approves the monitoring plan with the changes and approach outlined in the revised work plan and proposed changes in the responses to comments letters submitted to the Regional Board on February 26, 2014 and April 21, 2014.

The first annual monitoring report under the approved CCMRP for the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL shall be submitted to the Regional Board as soon as the data become available and no later than March 3, 2016. The annual report shall be submitted to:

California Regional Water Quality Control Board  
Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, California, 90013

ATTN: Thanhloan Nguyen.

An electronic copy of the annual report shall also be submitted to the Regional Board via email (for document <10 MB) at [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov). Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed above. If you need additional information regarding Electronic Submittal of Documents please visit the Regional Board's website and navigate to Paperless Office:  
<http://www.waterboards.ca.gov/losangeles/resources/Paperless/>

If you have any questions, please do not hesitate to contact Thanhloan Nguyen at (213) 576-6689, or [tnguyen@waterboards.ca.gov](mailto:tnguyen@waterboards.ca.gov).

Sincerely,



Samuel Unger, P.E.  
Executive Officer

Attachments:

- Attachment 1: Comment Letters Received
- Attachment 2: Responses to Comments Letter Dated February 26, 2014
- Attachment 3: Responses to Comments Letter Dated April 21, 2014

cc:

California Department of Transportation  
City of Bellflower  
City of Lakewood  
City of Long Beach  
City of Los Angeles  
City of Paramount  
City of Rancho Palos Verdes  
City of Rolling Hills  
City of Rolling Hills Estates  
City of Signal Hill  
Los Angeles County  
Los Angeles County Flood Control District  
The U.S. Environmental Protection Agency

## Nguyen, Thanhloan@Waterboards

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**From:** Kozelka, Peter <Kozelka.Peter@epa.gov>  
**Sent:** Monday, September 30, 2013 12:10 PM  
**To:** Nguyen, Thanhloan@Waterboards  
**Cc:** Nye, LB@Waterboards  
**Subject:** review of CCMRP for greater LA-LB Harbor waterbodies

### General Qs:

- I. The proposed CCMRP identifies sampling sites that are supposedly consistent with the TMDL Compliance Monitoring Stations; that should be double checked. Certain monitoring locations appear to be within the middle of the waterbody and should be carefully re-considered. For example, the Fish Harbor location is within the middle of this waterbody and yet the historic WQ/sediment sample results are elevated at sites closer to the edges/slips, so a sediment site within the Fish Harbor might show it is 'clean' within the first year. So I think this needs more attention and careful consideration.
- II. We should encourage the responsible parties to utilize some continuous monitoring probes to collect salinity, temperature and current data. The RPs may already have some of these in place and the CTD (conductivity, temperature, DO) probes are not inexpensive; however we could make the case that WQ modelers have acknowledged (Ttech model reports) that existing monitoring data had captured only a few minor salinity variations due to wet weather conditions and therefore to improve the hydrodynamic portion of the model to better represent the ambient Harbor conditions, we need more continuous CTD results.

### Specific Qs:

- a. EPA Method 1668 for PCBs and chlorinated pesticides should be used in lieu of EPA Method 625. Ambient monitoring does not HAVE to utilize EPA Methods in CFR Part 136; therefore more advanced and more sensitive methods can and should be used when appropriate, since Method 1668 has a lower detection limit for PCB congeners and for chlorinated pesticide compound...it will yield monitoring results that can be compared to the appropriate WQ criteria (e.g., CTR human health value for PCBs = 0.00017 ug/L).
- b. Can we promote the 2<sup>nd</sup> wet weather sample be collected under higher rainfall conditions than 0.1 in? That is, we want monitoring to be under diverse conditions and if we capture samples under two small wet weather events then it doesn't really help us characterize as to what ambient conditions are like in wet weather. I'm not sure how to change the proposed language but I feel it is not encouraging enough for directing the monitoring program to capture a small and a medium stormevent.
- c. Does the field sampling protocol include using 'clean hands/dirty hands'? I could not find a specific reference for EPA Sampling Method 1669 which describes the clean hands/dirty hands techniques for water sample collection.
- d. Are they proposing to collect any "SPME" sampling or water sampling from very close to sediments? Hope so.

Draft CCMRP pg. 13.....

In years when sampling for the sediment quality component of the compliance monitoring program aligns with the Southern California Bight Regional Monitoring Program (Bight Program), station locations may be modified in order to meet the Bight Program's requirement that station locations representing different strata (bay, port, marina, and estuary) be selected randomly. Therefore, Bight Program stations that are located within the same waterbody segment (e.g., turning basin, channel) as the Harbor Toxics TMDL-specified station locations will be considered representative of the Harbor Toxics TMDL-specified

station location. If a Bight Program station is not located within the same waterbody segment, then the Harbor Toxics TMDL-specified station location will be sampled.

Feel free to call me to discuss further.

*respectfully,*

Peter Kozelka, Ph.D.

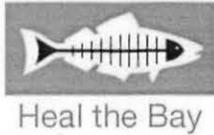
Water Division, NPDES permits

EPA Region 9

San Francisco, CA 94105

phone (415) 972-3448

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1444 9th Street  
Santa Monica CA 90401

ph 310 451 1500  
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October 15, 2013

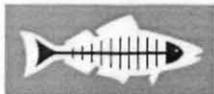
Los Angeles Regional Water Quality Control Board  
320 West Fourth Street, Suite 200  
Los Angeles, CA 90013

Dear Mr. Unger,

On behalf of Heal the Bay, we submit the following comments on the Coordinated Compliance, Monitoring, and Reporting Plan ("CCMRP") for responsible parties in the Greater Los Angeles and Long Beach Harbor waters. We would first like to thank the Regional Board for allowing us to provide comment on the CCMRP. We believe several elements of the CCMRP need to be adjusted to best assess each responsible party's progress towards meeting the Dominguez Channel and Greater Los Angeles and Long Beach Toxic TMDL ("Toxics TMDL").

Upon reviewing the document, we have a few questions and concerns regarding the Plan:

- The Dominguez Channel and Greater Los Angeles and Long Beach Toxic TMDL requires Los Angeles and Long Beach Harbor dischargers to monitor for waste load allocations at "storm drain outfalls or points in the receiving water that suitably represent the combined discharge of cooperating parties." We have concerns that the selected combined monitoring locations in the CCMRP may not allow for clarity and source identification, including pinpointing individual dischargers who are not meeting with waste load allocations. How will the Regional Board be certain that individual dischargers are in compliance with waste load allocations established in the Toxics TMDL? We suggest outfall monitoring be added to the CCMRP to aid in source identification.
- How was the number of monitoring locations in each waterbody established in the CCMRP? Some of the larger areas such as East San Pedro Bay have a relatively small number of locations. This should be substantiated within the CCMRP. Additionally, we are unsure why specific locations were chosen in each waterbody. Storms, tides, port operations, and fluvial systems are a few of the events that effect water and sediment quality. We believe that explanation regarding waterbody monitoring locations is missing in the CCMRP and ask it be included to ensure that appropriate monitoring is occurring in receiving water.
- The CCMRP requires fish tissue monitoring for white croaker, California halibut, and shiner surfperch at four locations throughout the Los Angeles and Long Beach Harbor Waters. The CCMRP outlines that 12 fish of each species will be used to create three composite samples to determine fish tissue toxic constituent concentrations. We have concerns that this method will not accurately represent fish tissue concentrations for monitored species in the CCMRP. Composite sampling is only one of many methods used to test for constituent concentrations in fish tissue; it often results in misleading constituent concentrations as it relies on combining numerous samples into one composite. Composite sampling can often contain outliers, resulting in concentrations that do not accurately represent an entire population. In other



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words, individual fish that are less polluted could mask individual fish with concentrations that are above standards.

We believe that whole fish and whole fillet sampling should be added in addition to composite sampling in the Plan. We suggest that instead of using three composite samples, the CCMRP use one composite sample consisting of four fish, four whole fish samples, and four whole fillet samples to monitor for Toxic TMDL constituents in fish tissue. Using these three sampling methods would best characterize fish tissue concentration for selected species and safeguard against misleading monitoring results.

Thank you for this opportunity to provide comment on the Coordinated Compliance, Monitoring, and Reporting Plan. We ask that you consider the aforementioned issues. If you have any questions, please contact us at (310) 451-1500.

Sincerely,

Peter Shellenbarger, MESM  
Science and Policy Analyst  
Heal the Bay

Kirsten James, MESM  
Science and Policy Director, Water Quality  
Heal the Bay



Western States Petroleum Association  
Credible Solutions • Responsive Service • Since 1907

[losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov)

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[Thanhloan.Nguyen@waterboards.ca.gov](mailto:Thanhloan.Nguyen@waterboards.ca.gov)

October 7, 2013

Los Angeles Regional Water Quality Control Board  
320 W 4<sup>th</sup> Street, #200  
Los Angeles, CA 90013

Subject: Comments on Coordinated Compliance, Monitoring, and Reporting Plan for Greater Los Angeles and Long Beach Harbor Waters

Dear Ms. Nye and Ms. Nguyen:

The Western States Petroleum Association (WSPA) is a non-profit trade association representing twenty-seven companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California, Arizona, Nevada, Oregon, Washington and Hawaii.

On September 23, 2013, the Los Angeles Regional Water Board released for public comment the Coordinated Compliance and Monitoring Reporting Plan (CCMRP) for the Greater Los Angeles and Long Beach Harbor Waters. WSPA members have facilities that from time-to-time discharge stormwater into Dominguez Channel and Harbor waters and will be regulated by the Harbor Toxics TMDL, and as such are very interested in the CCMRP.

WSPA has always supported the concept of regional monitoring programs and hereby endorses the concept of a regional monitoring program for the Harbor TMDL as envisioned in the draft CCMRP. WSPA is interested in ensuring the CCMRP is open to all dischargers and that participation is in a fair and equitable manner. We look forward to the next steps in the CCMRP process.

We also note the comment period from September 23 to October 7 was not long enough to allow for a comprehensive analysis of the highly technical 247 page document.

Please contact me at (310) 678-7782 if WSPA can provide additional information or if you have questions regarding these comments.

Sincerely,

A handwritten signature in cursive script that reads "Patty Senecal". The signature is written in dark ink and is positioned above the typed name.

Patty Senecal  
Manager, Southern California Region and Infrastructure Issues  
Western States Petroleum Association

Comments on LARWQCB Coordinated Compliance, Monitoring, and Reporting Plan for Greater Los Angeles and Long Beach Harbor Waters due 10.7.2013

NPDES permits are issued for Point Sources. Harbor Toxics TMDL monitoring and reporting is based on stations not near the outfall points.

CONSOLIDATED SLIP testing is the center of Consolidated Slip

LOS ANGELES INNER HARBOR testing sites are:

1. East Turning Basin
2. Center of the Port of Los Angeles West Basin
3. Main Turning Basin north of Vincent Thomas Bridge
4. Between Pier 300 and Pier 400
5. Main Channel south of Port O' Call

FISH HARBOR testing is the center of inner portion of Fish Harbor

LOS ANGELES OUTER HARBOR testing sites are:

1. Los Angeles Outer Harbor between Pier 400 and middle breakwater
2. Los Angeles Outer Harbor between the southern end of the reservation point and the San Pedro breakwater

CABRILLO MARINA testing is the center of West Channel.

INNER CABRILLO BEACH is the center of Inner Cabrillo Beach.

SAN PEDRO BAY testing sites are:

1. Northwest of San Pedro Bay near Los Angeles River Estuary
2. East of San Pedro Bay
3. South of San Pedro Bay inside breakwater

LOS ANGELES RIVER ESTUARY testing sites are:

1. Los Angeles River Estuary Queensway Bay
2. Los Angeles River Estuary

We fail to see how the hazards are identified at the outfall or source point. Considering the usage of these waters by domestic and foreign ships, how can the permittees be responsible for pollutant loads in the waterbodies themselves?

How and when does reasonable assurance that attainment will be achieved occur with so many unknowns?

Joyce Dillard  
P.O. Box 31377  
Los Angeles, CA 90031



February 26, 2014

Mr. Sam Unger, Executive Officer  
Los Angeles Regional Water Quality Control Board  
320 West 4th Street, Suite 200  
Los Angeles, CA 90013

Dear Mr. Unger:

**SUBJECT: REQUEST FOR APPROVAL OF THE GREATER HARBOR WATERS REGIONAL MONITORING COALITION'S COORDINATED COMPLIANCE MONITORING AND REPORTING PLAN**

The amendment to the Water Quality Control Plan – Los Angeles Region (Basin Plan Amendment) to incorporate the Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters<sup>1</sup> specifies compliance monitoring requirements for water, sediment, and fish tissue in the Greater Los Angeles and Long Beach Harbor Waters (including Consolidated Slip; herein referred to as Greater Harbor Waters). The Basin Plan Amendment recommends that responsible parties collaborate or coordinate compliance monitoring efforts to avoid duplication and reduce associated costs. As such, the responsible parties<sup>2</sup> for the Greater Harbor Waters have formed a Regional Monitoring Coalition (RMC) and have developed a Coordinated Compliance Monitoring and Reporting Plan (CCMRP).

The Draft CCMRP was provided to the Los Angeles Regional Water Quality Control Board (RWQCB) on June 24, 2013. The RWQCB provided comments on November 7 and met with the Ports of Long Beach and Los Angeles (Ports) to discuss those comments on November 8. The CCMRP was revised accordingly; a response to comment table, detailing any changes to the CCMRP, is included with this submittal.

The Ports, on behalf of the Greater Harbor Waters RMC, request that the RWQCB review and approve this revised CCMRP (attached).

Sincerely,

CHRISTOPHER CANNON  
Director of Environmental Management  
Port of Los Angeles

MATTHEW ARMS  
Acting Director of Environmental Planning  
Port of Long Beach

cc: Caltrans  
City of Bellflower  
City of Lakewood  
City of Long Beach  
City of Los Angeles  
City of Paramount  
City of Rancho Palos Verdes  
City of Rolling Hills  
City of Rolling Hills Estates  
City of Signal Hill  
Los Angeles County  
Los Angeles County Flood Control District

<sup>1</sup> Attachment A to Resolution No. R11-008.

<sup>2</sup> The list of potential responsible parties included in the Draft CCMRP is subject to change pending further review by the RWQCB staff.

Comment No.	Comment	Comment Response	Changes to Document
1	<p>Sampling location (page ES-1):</p> <p>The proposed CCMRP identifies sampling sites which should represent the overall condition of each water body. For those waterbodies with only one sampling station such as Consolidated Slip; Fish Harbor; Cabrillo Marina; and Inner Cabrillo Beach, we wonder if there is a way to be sure areas of concern (e.g.; anticipated higher pollutant levels) are included to ensure we can assess the overall condition of that waterbody.</p>	<p>The CCMRP shall remain a TMDL-focused monitoring plan; any additional programs or special studies will be addressed separately. Including special studies will delay completion of the report. Any special studies will be identified in implementation plans or contaminated sediment management plans.</p>	<p>No changes made.</p>
2	<p>First large storm even should be included (page ES-6):</p> <p>We would like to require that the first large storm event of the season be included as one of the wet weather monitoring events. However, we are not sure of the best way to define “first large” and concerned if we set the definition too “large” and it does not rain much or rain in any “large” event, we may miss the available opportunities to sample.</p> <p><i>The first large (definition??) shall be sampled and the other wet weather event shall be a storm event that produces at least 0.25 inches (0.64 cm) for a regular year or at least 0.1 inches (0.25 cm) for a predicted drought year.</i></p>	<p>Text will be added to the CCMRP to more clearly explain why a 0.25-inch storm will be targeted. The second storm will be prioritized for a larger event of at least 0.50 inch; however; consideration will be given to whether sampling is being conducted in a wet year and whether the probability of a large storm exists.</p>	<p>Added the following sentence to the Executive Summary: “The first large storm of the season will be targeted as one of the two wet weather events and will have a predicted rainfall of at least 0.25 inch (0.64 centimeter) with a 70 percent probability of rainfall at least 24 hours prior to the event start time.”</p> <p>Added the following sentences to Section 4.3.1: “Defining a storm event as having a predicted rainfall of at least 0.25 inch (0.64 cm) is consistent with the Los Angeles County Department of Public Works trigger for monitoring mass emission stations of 0.25 inch (0.64 cm) rainfall received within a 24-hour period. Constraining the first storm event of a season to be greater than 0.25 inch (0.64 cm) may preclude characterizing contaminants of potential concern (COPCs) if a larger storm does not occur until late in the season. For example, a study funded by Caltrans (Stenstrom and Kayhanian 2005) revealed that concentrations of COPCs declined as the wet season progressed.”</p>

Comment No.	Comment	Comment Response	Changes to Document
			<p>Revised the sentence regarding the second storm event to read: “Depending on the seasonal forecast (e.g., drought vs. wet years), this wet weather event will consist of a storm that produces at least 0.1 inch (0.25 cm) of precipitation per day and separated by an antecedent dry period (less than 0.1 inch [0.25 cm] of rain per day) of at least 72 hours, but consideration will be given to monitor larger storm events (0.5 inch [1.28 cm] or greater) if forecasted.”</p> <p>Added the citation Stenstrom and Kayhanian 2005 to References.</p>
3	<p>Clarification on test organism species (page ES-6):</p> <p>Add footnote to clarify acceptable test organisms for short term survival tests including <i>Eohaustorius</i>, <i>Leptocheirus plumulosus</i>, and <i>Rhepoxynius abronius</i>.</p>	<p>A footnote will be added to clarify test organism species.</p>	<p>Added the following footnote in regards to acute amphipod survival test: “Acceptable test species in accordance with SQO guidance (Bay et al. 2009) include <i>Eohaustorius estuarius</i>, <i>Leptocheirus plumulosus</i>, or <i>Rhepoxynius abronius</i>.”</p> <p>In addition, added the following sentence to Section 7.2.2 to introduce the potential use of <i>Rhepoxynius abronius</i>: “In addition, if healthy <i>E. estuarius</i> organisms are not available during the required sampling period, then <i>Rhepoxynius abronius</i> may be an acceptable species for toxicity testing.”</p>
4	<p>Need language to explain and provide information on why only white croaker will be collected at Consolidated Slip for transparency.</p>	<p>There is a single statement in the Basin Plan Amendment (BPA) that says fish tissue will be collected in Consolidated Slip (see pages 26 and 27). Under Fish Tissue Monitoring for Greater Harbor Waters, it states three species shall be collected, including white croaker.</p> <p>Collecting three species in such a small area would be challenging, and costs and labor should be considered.</p> <p>Justification language will be added to the document.</p>	<p>Added the following text to Section 5.3.1:</p> <p>White croaker is the only species being sampled in Consolidated Slip for the following reasons:</p> <ul style="list-style-type: none"> <li>• White croaker is more abundant in this subarea and easier to catch than California halibut or shiner perch as demonstrated in the Ports’ Biological Baseline Survey from 2008 (SAIC 2010).</li> <li>• The Consolidated Slip area is small and consequently has limited space available for</li> </ul>

Comment No.	Comment	Comment Response	Changes to Document
			<p>targeted fish collection of uncommon species such as California halibut and shiner perch.</p> <ul style="list-style-type: none"> <li>Based on historical data, white croaker represent the fish with the highest concentrations of PCBs and other organics, and therefore, croaker is indicative of the highest human health exposure levels in relation to seafood consumption from this subarea.</li> </ul>
5	Interim and final WLAs and LAs should be added to Section 1.3.	WLA and LA information will be added for completeness.	<p>Added Section 1.3.2 “Interim and Final Waste Load Allocations and Load Allocations” to the document. Introductory text was taken directly from the Attachment A to Resolution No. R11-008, Amendment to the Water Quality Control Plan – Los Angeles Region, and a summary of tables providing WLA and LAs is provided.</p> <p>For clarity, changed the first listed item in Section 1.4 from “Final sediment allocations, as presented above, are met.” to “Final sediment allocations, as presented in Attachment A to Resolution No. R11-008, Amendment to the Water Quality Control Plan – Los Angeles Region, are met.”</p>
6	Need to include report of compliance and non-compliance with WLAs and LAs as part of annual report (section 1.5, pages 3-4).	A comment will be added noting TMDL compliance with WLAs is not applicable to this monitoring program; it is applicable to the MS4 program. A list of criteria to be used to compare monitored data will be provided for numeric targets (i.e., effects range low [ERL], effects range median [ERM], and fish contamination goals [FCGs]) and qualitative sediment condition defined by the Statewide Enclosed Bays and Estuaries Plan.	<p>Added and revised the following sentences in Section 1.5 to read:</p> <p>The Harbor Toxics TMDL further specifies that monitoring and reporting plans shall include a requirement that the responsible parties report compliance and non-compliance with WLA and LAs as part of annual reports submitted to the RWQCB. The evaluation of compliance with WLAs is not applicable to a receiving water monitoring program and will be included in MS4 programs. The Harbor Toxics TMDL permits multiple means for demonstrating compliance with sediment and fish tissue TMDLs. Therefore, the</p>

Comment No.	Comment	Comment Response	Changes to Document
			<p>report will include the following data summaries:</p> <ul style="list-style-type: none"> <li>• Water quality compared to applicable water quality criteria (e.g., CTR values)</li> <li>• Sediment quality compared to effects range low (ERL), effects range median (ERM), sediment associated fish contamination goals (FCG) values, and a qualitative sediment condition defined by the Statewide Enclosed Bays and Estuaries Plan</li> <li>• Fish tissue concentrations compared to FCG values</li> </ul>
7	Correction on compliance measures for fish tissues to be consistent with the TMDL.	TMDL compliance language will be included exactly as it is presented in the BPA, for consistency.	<p>In Section 1.4, Item 2 and 4 related to fish tissue compliance were updated.</p> <p>Item 2 was changed from “Final sediment allocations (based on sediment fish tissue linkage in the Harbor Toxics TMDL) are met.” to “Final sediment allocations, as presented in Attachment A to Resolution No. R11-008, Amendment to the Water Quality Control Plan – Los Angeles Region, are met.”</p> <p>Item 4 was changed from “SQO protective of fish tissue is achieved through the Statewide Enclosed Bays and Estuaries Plan (the SQO for Indirect Effects is under development).” to “Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife.”</p>
8	EPA Method 1668 for PCBs and chlorinated pesticides should be used in lieu of EPA Method 625 for lower detection limits (Table 16).	Many criteria were used to select the recommended analytical method for this large monitoring program, including the type of congeners quantified, costs for analysis, and potential for false detections or field/laboratory contamination. Other factors such as turn-around time for analysis and TMDL target concentrations were also considered and are discussed	No changes made.

Comment No.	Comment	Comment Response	Changes to Document
		<p>in the sections below. Method 1668 measures all 209 congeners with ultra-low detection limits (0.005 ng/L) and costs approximately \$1,000 per sample. Method 625 or 8270C-SIM provides a comparable quantitative measurement (mass spectrometer) of key regional toxic congeners with low detection limits (0.1 nanograms per liter [ng/L]) and costs approximately \$300 per sample. While Method 1668 is more sensitive than Method 625/8270C-SIM, it can result in false detections due to field or laboratory contamination, which can be exacerbated if applied to large field programs requiring efficient processing and turn-around times.</p> <p>For sediment and fish tissue, polychlorinated biphenyls (PCBs) are anticipated to be detected in the majority of samples collected using Method 625/8270C-SIM (or its equivalent) and that the key regional toxic congener list reported would be sufficient for the objectives of the monitoring program. Previous sampling in the Harbor has resulted in the majority of samples demonstrating detects for PCBs (i.e., 80 percent detects for sediment and 99 percent detects for fish tissue). In addition the detection limits provided by Method 625/8270C-SIM are below TMDL targets, thus providing sufficient certainty for determining whether TMDL targets are exceeded or not. Thus, the additional cost of using Method 1668 is disproportionate to the benefits and not recommended.</p> <p>For waters, PCB concentrations are anticipated to be low and difficult to detect with either method. The use of method 1668 is not believed as appropriate or necessary because no water column PCB TMDL target is included the TMDL. In addition, this method is cost-</p>	

Comment No.	Comment	Comment Response	Changes to Document
		<p>prohibitive, as it has long turn-around times; requires highly controlled sample collection, extraction, and analysis; and is only run by specialty and non-commercial laboratory. Without highly controlled sampling and analysis procedures, the sensitivity of Method 1668 for water column samples is uncertain and may not be cost effective; the use of Method 1668 in the Marina del Rey low detection limit water column study (Brown and Caldwell 2013<sup>1</sup>) resulted in false detections due to field or laboratory contamination. The holding times and representativeness of all the data being collected needs to be considered and would be compromised by the specialized handling requirements necessary to provide the greatest opportunity for this method to be meaningful. The use of Method 1668 would require special study conditions with specialized sample handling and laboratory coordination requirements that cannot be accommodated appropriately in a monitoring program of this size.</p> <p>Results of the Ports' ongoing low detection limit water column study, which will examine the use several technologies and/or methods for measuring trace organics in the water column, will likely be available in late spring 2014 and will provide quantitative information on the sensitivity of this method for the evaluation of PCBs in Harbor waters.</p> <p>Based on the rationale provided above, Method 625/8270C-SIM is proposed for water column compliance monitoring. Use of this method will provide reliable, low detection results at a reasonable</p>	

<sup>1</sup> Brown and Caldwell, 2011. Low Detection Level Study Report Marina del Rey Harbor Toxic Pollutants TMDL. Prepared for County of Los Angeles Department of Public Works, City of Los Angeles, City of Culver City, and California Department of Transportation. December 2011.

Comment No.	Comment	Comment Response	Changes to Document
		cost. If the analytical sensitivity for Method 1668 improves and the cost decreases, the PCB method selection for analyzing waters could be re-evaluated.	
9	EPA Method 1669 should be referenced in Section 7.1 Field Measurements and Analytical Methods Section and Tables 16 and 17 of the CCMRP as ambient water sampling method for trace metals.	Sample collection techniques provided in Method 1669 are applicable to samples being analyzed for trace metals using 1600 series methods. The 1600 series methods are not necessary in Harbor waters, because metals are currently detected using standard methods as demonstrated by the comprehensive water column metals results in the Weston's TMDL Support Study (2007). <sup>2</sup>	No changes made.

<sup>2</sup> Weston Solutions, Inc., 2007. Final Report Characterization of Sediment Contaminant Flux for the Inner Harbor and Outer Harbor Waterbodies to Support Sediment TMDL Implementation Ports of Los Angeles and Long Beach, California. Prepared for Port of Los Angeles and Port of Long Beach. May 2007.



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April 21, 2014

Mr. Samuel Unger, P.E.  
Executive Officer  
Los Angeles Regional Water Quality Control Board  
320 West 4th Street, Suite 200  
Los Angeles, California 90013

**Subject: Response to Comments on the Coordinated Compliance Monitoring and Reporting Plan for the Greater Harbor Waters**

Dear Mr. Unger:

The amendment to the Water Quality Control Plan – Los Angeles Region (Basin Plan Amendment) to incorporate the Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters<sup>1</sup> (Harbor Toxics TMDL) specifies compliance monitoring requirements for water, sediment, and fish tissue in the Greater Los Angeles and Long Beach Harbor Waters (including Consolidated Slip; herein referred to as Greater Harbor Waters). The Basin Plan Amendment recommends that responsible parties collaborate or coordinate compliance monitoring efforts to avoid duplication and reduce associated costs. As such, the responsible parties<sup>2</sup> for the Greater Harbor Waters have formed a Regional Monitoring Coalition (RMC) and have developed a Coordinated Compliance Monitoring and Reporting Plan (CCMRP).

The Draft CCMRP was provided to the Los Angeles Regional Water Quality Control Board (RWQCB) on June 24, 2013. The RWQCB provided comments on November 7 and met with the Ports of Long Beach and Los Angeles (Ports) to discuss those comments on November 8. The CCMRP was revised accordingly and resubmitted to the RWQCB on February 26, 2014, with a formal response to comments table.

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<sup>1</sup> Attachment A to Resolution No. R11-008

<sup>2</sup> The list of responsible parties included in the Draft CCMRP is subject to change pending further review by the RWQCB staff.

On April 1, 2014, the Ports, on behalf of the RMC, met with LB Nye and Thanhloan Nguyen from the RWQCB to discuss the RWQCB's remaining comment to the CCMRP for the Greater Harbor Waters to support the Harbor Toxics TMDL. Prior to that meeting, the RWQCB indicated that all of the proposed revisions to the CCMRP had been accepted and approved with the exception of the proposed revisions to Comment No. 1. A copy of the response to comments table, including the original comments from the RWQCB, is attached for reference.

During the April 1 meeting, the RWQCB reiterated its intent that sediment sampling stations should be located to ensure an assessment of the overall condition of the waterbody. In order to accomplish this assessment, it was recommended that sediment sampling stations be drawn randomly for each sediment monitoring event, rather than only when the sediment monitoring event is coordinated with the Southern California Coastal Water Research Project's (SCCWRP's) Bight Regional Monitoring Program (Bight Program). Currently, the CCMRP identifies a central point within each Harbor Toxics TMDL-specified station location that would be monitored in non-Bight Program years.

This letter acknowledges the RWQCB's recommendation and confirms that sediment sampling stations will be drawn randomly for sediment monitoring events not coordinated with the Bight Program. Random selection will be conducted similar to methods used by SCCWRP for selecting Bight Program stations. One station will be located in each of the 22 Harbor Toxics TMDL-specified station location areas (Figure 1). A subset of the compliance monitoring stations may be strategically placed (i.e., targeted, not random) to confirm results of Bight Program or other program Sediment Quality Objective (SQO) results. Locations of all sediment sampling stations, and the justification for their selection, will be provided to the RWQCB for approval prior to conducting the sediment monitoring event.

Furthermore, if a randomly drawn Bight Program station does not fall within each of the 22 Harbor Toxics TMDL-specified station location areas when sediment monitoring events are coordinated with the Bight Program, then a sediment sampling station will be drawn randomly for each of those areas not containing a Bight Program station.

As discussed, no additional sediment sampling locations will be placed for the purposes of compliance monitoring and reporting and no changes to the sampling locations for water quality monitoring or tissue collections will be made.

The Ports, on behalf of the RMC, request that the RWQCB accept this proposed change to the selection of sediment sampling stations and approve the CCMRP.

Sincerely,



Christopher Cannon  
Director of Environmental Management  
Port of Los Angeles



Heather A. Tomley  
Director of Environmental Planning  
Port of Long Beach

Cc: California Department of Transportation    City of Rancho Palos Verdes  
City of Bellflower    City of Rolling Hills  
City of Lakewood    City of Rolling Hills Estates  
City of Long Beach    City of Signal Hill  
City of Los Angeles    Los Angeles County  
City of Paramount    Los Angeles County Flood Control District

# RESPONSE TO COMMENTS TABLE

Comment No.	Comment	Comment Response	Changes to Document
1	<p>Sampling location (page ES-1):</p> <p>The proposed CCMRP identifies sampling sites which should represent the overall condition of each water body. For those waterbodies with only one sampling station such as Consolidated Slip; Fish Harbor; Cabrillo Marina; and Inner Cabrillo Beach, we wonder if there is a way to be sure areas of concern (e.g.; anticipated higher pollutant levels) are included to ensure we can assess the overall condition of that waterbody.</p>	<p>The CCMRP shall remain a TMDL-focused monitoring plan; any additional programs or special studies will be addressed separately. Including special studies will delay completion of the report. Any special studies will be identified in implementation plans or contaminated sediment management plans.</p>	<p>No changes made.</p>
2	<p>First large storm even should be included (page ES-6):</p> <p>We would like to require that the first large storm event of the season be included as one of the wet weather monitoring events. However, we are not sure of the best way to define “first large” and concerned if we set the definition too “large” and it does not rain much or rain in any “large” event, we may miss the available opportunities to sample.</p> <p><i>The first large (definition??) shall be sampled and the other wet weather event shall be a storm event that produces at least 0.25 inches (0.64 cm) for a regular year or at least 0.1 inches (0.25 cm) for a predicted drought year.</i></p>	<p>Text will be added to the CCMRP to more clearly explain why a 0.25-inch storm will be targeted. The second storm will be prioritized for a larger event of at least 0.50 inch; however; consideration will be given to whether sampling is being conducted in a wet year and whether the probability of a large storm exists.</p>	<p>Added the following sentence to the Executive Summary: “The first large storm of the season will be targeted as one of the two wet weather events and will have a predicted rainfall of at least 0.25 inch (0.64 centimeter) with a 70 percent probability of rainfall at least 24 hours prior to the event start time.”</p> <p>Added the following sentences to Section 4.3.1: “Defining a storm event as having a predicted rainfall of at least 0.25 inch (0.64 cm) is consistent with the Los Angeles County Department of Public Works trigger for</p>

Comment No.	Comment	Comment Response	Changes to Document
2 (cont.)			<p>monitoring mass emission stations of 0.25 inch (0.64 cm) rainfall received within a 24-hour period. Constraining the first storm event of a season to be greater than 0.25 inch (0.64 cm) may preclude characterizing contaminants of potential concern (COPCs) if a larger storm does not occur until late in the season. For example, a study funded by Caltrans (Stenstrom and Kayhanian 2005) revealed that concentrations of COPCs declined as the wet season progressed.”</p> <p>Revised the sentence regarding the second storm event to read: “Depending on the seasonal forecast (e.g., drought vs. wet years), this wet weather event will consist of a storm that produces at least 0.1 inch (0.25 cm) of precipitation per day and separated by an antecedent dry period (less than 0.1 inch [0.25 cm] of rain per day) of at least 72 hours, but consideration will be given to monitor larger storm events (0.5 inch [1.28 cm] or greater) if forecasted.”</p> <p>Added the citation Stenstrom and Kayhanian 2005 to References.</p>

Comment No.	Comment	Comment Response	Changes to Document
3	<p>Clarification on test organism species (page ES-6):</p> <p>Add footnote to clarify acceptable test organisms for short term survival tests including <i>Eohaustorius</i>, <i>Leptocheirus plumulosus</i>, and <i>Rhepoxynius abronius</i>.</p>	<p>A footnote will be added to clarify test organism species.</p>	<p>Added the following footnote in regards to acute amphipod survival test: “Acceptable test species in accordance with SQO guidance (Bay et al. 2009) include <i>Eohaustorius estuarius</i>, <i>Leptocheirus plumulosus</i>, or <i>Rhepoxynius abronius</i>.”</p> <p>In addition, added the following sentence to Section 7.2.2 to introduce the potential use of <i>Rhepoxynius abronius</i>: “In addition, if healthy <i>E. estuarius</i> organisms are not available during the required sampling period, then <i>Rhepoxynius abronius</i> may be an acceptable species for toxicity testing.”</p>
4	<p>Need language to explain and provide information on why only white croaker will be collected at Consolidated Slip for transparency.</p>	<p>There is a single statement in the Basin Plan Amendment (BPA) that says fish tissue will be collected in Consolidated Slip (see pages 26 and 27). Under Fish Tissue Monitoring for Greater Harbor Waters, it states three species shall be collected, including white croaker.</p> <p>Collecting three species in such a small area would be challenging, and costs and labor should be considered.</p> <p>Justification language will be added to the document.</p>	<p>Added the following text to Section 5.3.1:</p> <p>White croaker is the only species being sampled in Consolidated Slip for the following reasons:</p> <ul style="list-style-type: none"> <li>• White croaker is more abundant in this subarea and easier to catch than California halibut or shiner perch as demonstrated in the Ports’ Biological Baseline Survey from 2008 (SAIC 2010).</li> <li>• The Consolidated Slip area is small and consequently has limited space available for targeted fish collection of uncommon species such as California halibut and shiner perch.</li> <li>• Based on historical data, white croaker represent the fish with the highest concentrations of PCBs and other organics, and therefore, croaker is indicative of the highest human health exposure levels in relation to seafood consumption from this subarea.</li> </ul>

Comment No.	Comment	Comment Response	Changes to Document
5	Interim and final WLAs and LAs should be added to Section 1.3.	WLA and LA information will be added for completeness.	<p>Added Section 1.3.2 “Interim and Final Waste Load Allocations and Load Allocations” to the document. Introductory text was taken directly from the Attachment A to Resolution No. R11-008, Amendment to the Water Quality Control Plan – Los Angeles Region, and a summary of tables providing WLA and LAs is provided.</p> <p>For clarity, changed the first listed item in Section 1.4 from “Final sediment allocations, as presented above, are met.” to “Final sediment allocations, as presented in Attachment A to Resolution No. R11-008, Amendment to the Water Quality Control Plan – Los Angeles Region, are met.”</p>
6	Need to include report of compliance and non-compliance with WLAs and LAs as part of annual report (section 1.5, pages 3-4).	A comment will be added noting TMDL compliance with WLAs is not applicable to this monitoring program; it is applicable to the MS4 program. A list of criteria to be used to compare monitored data will be provided for numeric targets (i.e., effects range low [ERL], effects range median [ERM], and fish contamination goals [FCGs]) and qualitative sediment condition defined by the Statewide Enclosed Bays and Estuaries Plan.	<p>Added and revised the following sentences in Section 1.5 to read:</p> <p>The Harbor Toxics TMDL further specifies that monitoring and reporting plans shall include a requirement that the responsible parties report compliance and non-compliance with WLA and LAs as part of annual reports submitted to the RWQCB. The evaluation of compliance with WLAs is not applicable to a receiving water monitoring program and will be included in MS4 programs. The Harbor Toxics TMDL permits multiple means for demonstrating compliance with sediment and fish tissue TMDLs. Therefore, the report will include the following data summaries:</p> <ul style="list-style-type: none"> <li>• Water quality compared to applicable water quality criteria (e.g., CTR values)</li> </ul>

Comment No.	Comment	Comment Response	Changes to Document
6 (cont.)			<ul style="list-style-type: none"> <li>• Sediment quality compared to effects range low (ERL), effects range median (ERM), sediment associated fish contamination goals (FCG) values, and a qualitative sediment condition defined by the Statewide Enclosed Bays and Estuaries Plan</li> <li>• Fish tissue concentrations compared to FCG values</li> </ul>
7	Correction on compliance measures for fish tissues to be consistent with the TMDL.	TMDL compliance language will be included exactly as it is presented in the BPA, for consistency.	<p>In Section 1.4, Item 2 and 4 related to fish tissue compliance were updated.</p> <p>Item 2 was changed from “Final sediment allocations (based on sediment fish tissue linkage in the Harbor Toxics TMDL) are met.” to “Final sediment allocations, as presented in Attachment A to Resolution No. R11-008, Amendment to the Water Quality Control Plan – Los Angeles Region, are met.”</p> <p>Item 4 was changed from “SQO protective of fish tissue is achieved through the Statewide Enclosed Bays and Estuaries Plan (the SQO for Indirect Effects is under development).” to “Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife.”</p>
8	EPA Method 1668 for PCBs and chlorinated pesticides should be used in lieu of EPA Method 625 for lower detection limits (Table 16).	Many criteria were used to select the recommended analytical method for this large monitoring program, including the type of congeners quantified, costs for analysis, and potential for false detections or field/laboratory contamination. Other factors such as turn-around time for analysis and TMDL target	No changes made.

Comment No.	Comment	Comment Response	Changes to Document
8 (cont.)		<p>concentrations were also considered and are discussed in the sections below. Method 1668 measures all 209 congeners with ultra-low detection limits (0.005 ng/L) and costs approximately \$1,000 per sample. Method 625 or 8270C-SIM provides a comparable quantitative measurement (mass spectrometer) of key regional toxic congeners with low detection limits (0.1 nanograms per liter [ng/L]) and costs approximately \$300 per sample. While Method 1668 is more sensitive than Method 625/8270C-SIM, it can result in false detections due to field or laboratory contamination, which can be exacerbated if applied to large field programs requiring efficient processing and turn-around times.</p> <p>For sediment and fish tissue, polychlorinated biphenyls (PCBs) are anticipated to be detected in the majority of samples collected using Method 625/8270C-SIM (or its equivalent) and that the key regional toxic congener list reported would be sufficient for the objectives of the monitoring program. Previous sampling in the Harbor has resulted in the majority of samples demonstrating detects for PCBs (i.e., 80 percent detects for sediment and 99 percent detects for fish tissue). In addition the detection limits provided by Method 625/8270C-SIM are below TMDL targets, thus providing sufficient certainty for determining whether TMDL targets are exceeded or not. Thus, the additional cost of using Method 1668 is disproportionate to the benefits and not recommended.</p>	

Comment No.	Comment	Comment Response	Changes to Document
8 (cont.)		<p>For waters, PCB concentrations are anticipated to be low and difficult to detect with either method. The use of method 1668 is not believed as appropriate or necessary because no water column PCB TMDL target is included the TMDL. In addition, this method is cost-prohibitive, as it has long turn-around times; requires highly controlled sample collection, extraction, and analysis; and is only run by specialty and non-commercial laboratory. Without highly controlled sampling and analysis procedures, the sensitivity of Method 1668 for water column samples is uncertain and may not be cost effective; the use of Method 1668 in the Marina del Rey low detection limit water column study (Brown and Caldwell 2013<sup>3</sup>) resulted in false detections due to field or laboratory contamination. The holding times and representativeness of all the data being collected needs to be considered and would be compromised by the specialized handling requirements necessary to provide the greatest opportunity for this method to be meaningful. The use of Method 1668 would require special study conditions with specialized sample handling and laboratory coordination requirements that cannot be accommodated appropriately in a monitoring program of this size.</p> <p>Results of the Ports' ongoing low detection limit water column study, which will examine the use</p>	

<sup>3</sup> Brown and Caldwell, 2011. *Low Detection Level Study Report Marina del Rey Harbor Toxic Pollutants TMDL*. Prepared for County of Los Angeles Department of Public Works, City of Los Angeles, City of Culver City, and California Department of Transportation. December 2011.

Comment No.	Comment	Comment Response	Changes to Document
8 (cont.)		<p>several technologies and/or methods for measuring trace organics in the water column, will likely be available in late spring 2014 and will provide quantitative information on the sensitivity of this method for the evaluation of PCBs in Harbor waters.</p> <p>Based on the rationale provided above, Method 625/8270C-SIM is proposed for water column compliance monitoring. Use of this method will provide reliable, low detection results at a reasonable cost. If the analytical sensitivity for Method 1668 improves and the cost decreases, the PCB method selection for analyzing waters could be re-evaluated.</p>	
9	<p>EPA Method 1669 should be referenced in Section 7.1 Field Measurements and Analytical Methods Section and Tables 16 and 17 of the CCMRP as ambient water sampling method for trace metals.</p>	<p>Sample collection techniques provided in Method 1669 are applicable to samples being analyzed for trace metals using 1600 series methods. The 1600 series methods are not necessary in Harbor waters, because metals are currently detected using standard methods as demonstrated by the comprehensive water column metals results in the Weston's TMDL Support Study (2007).<sup>4</sup></p>	<p>No changes made.</p>

<sup>4</sup> Weston Solutions, Inc., 2007. *Final Report Characterization of Sediment Contaminant Flux for the Inner Harbor and Outer Harbor Waterbodies to Support Sediment TMDL Implementation Ports of Los Angeles and Long Beach, California*. Prepared for Port of Los Angeles and Port of Long Beach. May 2007.

FIGURE

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**Figure 1**  
TMDL Compliance Monitoring Locations  
Coordinated Compliance Monitoring and Reporting Plan  
Greater Los Angeles and Long Beach Harbor Waters