

## Los Angeles Regional Water Quality Control Board

March 16, 2015

Santa Monica Bay Jurisdictional Group 2 and 3 EWMP Group  
(See Distribution List)

### REVIEW OF THE SANTA MONICA BAY JURISDICTIONAL GROUP 2 AND 3 ENHANCED WATERSHED MANAGEMENT PROGRAM GROUP COORDINATED INTEGRATED MONITORING PROGRAM, PURSUANT TO ATTACHMENT E, PART IV.B OF THE LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT (NPDES PERMIT NO. CAS004001; ORDER NO. R4-2012-0175)

Dear Santa Monica Bay Jurisdictional Group 2 and 3 EWMP Group:

The Regional Water Board has reviewed the draft monitoring program submitted on June 27, 2014 by the Santa Monica Bay Jurisdictional Group 2 and 3 Enhanced Watershed Management Program Group (Group). This monitoring program was submitted pursuant to the provisions of NPDES Permit No. CAS004001 (Order No. R4-2012-0175), which authorizes discharges from the municipal separate storm sewer system (MS4) operated by 86 municipal Permittees within Los Angeles County (hereafter, LA County MS4 Permit). The LA County MS4 Permit allows Permittees the option to develop and implement a coordinated integrated monitoring program (CIMP) that achieves the five Primary Objectives set forth in Part II.A of Attachment E and includes the elements set forth in Part II.E of Attachment E. These programs must be approved by the Executive Officer of the Regional Water Board.

The Regional Water Board has reviewed the Group's draft CIMP and has determined that, for the most part, the CIMP includes the elements set forth in Part II.E of Attachment E and will achieve the Primary Objectives set forth in Part II.A of Attachment E of the LA County MS4 Permit. However, some additions and revisions to the CIMP are necessary. The Regional Water Board's comments on the draft CIMP, including detailed information concerning necessary additions and revisions to the CIMP, are found in Enclosure 1 and Enclosure 2.

Please make the necessary additions and revisions to the CIMP, as identified in the enclosures to this letter, and submit the revised CIMP as soon as possible and no later than **June 15, 2015**. The revised CIMP must be submitted to [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov) with the subject line "LA County MS4 Permit – Revised Santa Monica Bay Jurisdictional Group 2 and 3 EWMP Group CIMP" with a copy to [Ivar.Ridgeway@waterboards.ca.gov](mailto:Ivar.Ridgeway@waterboards.ca.gov) and [Erum.Razzak@waterboards.ca.gov](mailto:Erum.Razzak@waterboards.ca.gov).

Upon approval of the revised CIMP by the Executive Officer, the Group must prepare to commence its monitoring program within 90 days. If the necessary revisions are not made, the Group must comply with the Monitoring and Reporting Program and future revisions thereto, in Attachment E of the LA County MS4 Permit.

Until the Group's CIMP is approved by the Executive Officer, the monitoring requirements pursuant to Order No. 01-182 and Monitoring and Reporting Program CI 6948, and pursuant to approved TMDL monitoring plans shall remain in effect.

If you have any questions, please contact Ms. Erum Razzak of the Storm Water Permitting Unit by electronic mail at [Erum.Razzak@waterboards.ca.gov](mailto:Erum.Razzak@waterboards.ca.gov) or by phone at (213) 620-2095. Alternatively, you may also contact Mr. Ivar Ridgeway, Chief of the Storm Water Permitting Unit, by electronic mail at [Ivar.Ridgeway@waterboards.ca.gov](mailto:Ivar.Ridgeway@waterboards.ca.gov) or by phone at (213) 620-2150.

Sincerely,



Samuel Unger, P.E.  
Executive Officer

Enclosures: Enclosure 1 – Summary of Comments and Required Revisions  
Enclosure 2 – Comments on Aquatic Toxicity Testing  
Santa Monica Bay Jurisdictional Group 2 and 3 EWMP Group Distribution List

Los Angeles Regional Water Quality Control Board

**Enclosure 1 – Summary of Comments and Necessary Revisions to Draft CIMP**

**Santa Monica Bay Jurisdictional Group 2 & 3 EWMP Group**

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
<b>General</b>		
Appendix C Table C-3	Attachment D Part III.B	<p>In the draft CIMP, PCB Congeners is listed in Table C-3 but Appendix C does not specify which and how many congeners will be tested or the method by which they will be analyzed. In addition, Table C-3 footnote 3 is missing text. According to Table 6, note 7 of the CIMP, forty congeners will be analyzed in sediment/suspended solids. Please clarify this in Table C-3 of the CIMP. Samples should be analyzed for congeners using EPA Method 8270 or 1668C (as appropriate), and High Resolution Mass Spectrometry. According to Table 6, note 7 of the CIMP, congeners will be analyzed using high resolution mass spectrometry. Please clarify this in Table C-2 of the CIMP.</p> <p>Monitoring for PCBs in sediment or water should be reported as the summation of aroclors and a minimum of 40 (and preferably at least 50) congeners. See Table C8 in the state’s Surface Water Ambient Monitoring Program’s Quality Assurance Program Plan (Page 72 of Appendix C), which can be downloaded at <a href="http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/qaprp082209.pdf">http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/qaprp082209.pdf</a> for guidance.</p>
Appendix A Section 2.1.1		Please correct typographical error found in Appendix A Section 2.1.1 of the draft CIMP: “Error! Reference source not found.”
Table 2		Please correct typographical error found in Table 2 of the draft CIMP for category 1, SMB Beaches, Winter dry weather bacteria, where the date should be 11/1/2009 instead of “7/15/2009”. Also, please update note 1 to Table 2 to reflect that the 2012 revisions to the SMB Beaches Bacteria TMDL became effective on July 2, 2014.
<b>Receiving Water Monitoring</b>		
Section 2.2.4 & 2.3.3	Part IV.A.5 & IV.B.3	The draft CIMP states that receiving water monitoring to determine compliance with the Santa Monica Bay DDTs and PCBs TMDL (SMB DDT & PCB TMDL) will be fulfilled at the receiving water monitoring site at RW-SMB-2 for storm sediment monitoring.

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
		<p>The revised CIMP should provide further justification as to how sediment samples will be collected to determine if DDT and PCB loads at RW-SMB-2 are representative of the Group's EWMP area given that the drainage area to RW-SMB-2 is largely open space (77%) and single family residential (21%) and has less than one percent of its area in commercial, industrial, or transportation uses.</p>
Section 2.2.4	Part XIX.B	<p>The draft CIMP states that the City of El Segundo is in the process of developing the Trash Monitoring and Reporting Program (TMRP) and the Plastic Pellet Monitoring and Reporting Plan (PMRP) and will submit these reports separate from the CIMP.</p> <p>As per the implementation schedule of the Santa Monica Bay Nearshore and Offshore Debris TMDL (SMB Debris TMDL), the deadline to submit the TMRP and PMRP was September 20, 2012 and September 20, 2013 respectively. Since the deadlines to submit the TMRP and the PMRP have passed, the City of El Segundo must submit their TMRP and PMRP with the revised CIMP to meet the requirements of the SMB Debris TMDL.</p>
Section 2.2.4	Part XIX.B	<p>Regarding the City of LA's requirement to develop a TMRP for its area within J2/J3 of the SMB Watershed Management Area, the draft CIMP states that "a preliminary investigation of industries with standard industrial classification system (SIC) codes associated with manufacturing or use of plastic pellets within the City of Los Angeles was conducted, and it was found that no facilities were located within the City of Los Angeles for the SMB EWMP Group area". Therefore, "the City of Los Angeles is preparing to modify the emergency/spill response plan for hazardous material to include the actions required for a spill or release of plastic pellets within its jurisdictional area".</p> <p>The City of Los Angeles who is identified as a responsible party for point sources of trash in the SMB Debris TMDL shall either prepare a PMRP, or demonstrate that a PMRP is not required under certain circumstances. The City of Los Angeles, which claims to have no industrial facilities or activities related to the manufacturing, handling, or transportation of plastic pellets, may not be required to conduct monitoring at MS4 outfalls, but shall be required to include a response plan in the PMRP. In order to be absolved of the requirement to conduct monitoring at MS4 outfalls, documentation of the absence of industrial facilities and activities within the jurisdiction that are related to the manufacturing,</p>

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
		handling and transportation of plastic pellets must be provided in the revised CIMP.
Table 6, note 3	Part VI.C.1.e	The revised CIMP must clarify that parameters in Table E-2 of Attachment E of the LA County MS4 Permit will be monitored during the first significant rain event of the storm year for year 1 and the critical dry event for year 1.
Table 6	Part VI.D.1.a	<p>The draft CIMP in Table 6 proposes receiving water monitoring for one dry weather event at RW-SMB-2 for all applicable constituents.</p> <p>RW-SMB-2 must be monitored for two dry weather events. Based on receiving water data from the first year, the Group may then request in writing a reduction in dry weather monitoring frequency for consideration by the Regional Water Board.</p>
Appendix C Section 2.1.4	Part VI.D.1.a	<p>The draft CIMP states that “for dry weather toxicity monitoring, sampling must take place during the historically driest month”.</p> <p>However, the revised CIMP must specify that one of the dry weather monitoring events for all constituents in addition to toxicity will occur during the historically driest month.</p>
Table 6	Part VI.D.1.c.iv	<p>Table 6 of the draft CIMP is does not propose monitoring for TSS.</p> <p>The revised CIMP should include monitoring for TSS at RW-SMB-2 where lead is being monitored.</p>
<b>Storm Water Outfall Based Monitoring</b>		
Section 3.3	Part VII.A.1 – VII.A.10	<p>The draft CIMP lists missing elements for Part VII.A of Attachment E in the LA County MS4 Permit.</p> <p>The revised CIMP should ensure that all the elements listed under Part VII.A of Attachment E in the LA County MS4 Permit are submitted as they become available.</p>
Figure 1	Part VII.A.5	<p>Figure 1 of the draft CIMP shows the EWMP Group area in purple where a portion of the City of LA in Jurisdiction 7 is included.</p> <p>The revised CIMP should update Figure 1 so that the City of LA land area in Jurisdiction 7 is not included.</p>
	Part VIII.C.1	The revised CIMP must clarify that outfall sampling will be conducted during the first 24 hours of the storm water discharge or for the entire storm water discharge if it is less than 24 hours.
Section 2.2.4 & 2.3.3	Part IV.A.5 & IV.B.3	The revised CIMP should include monitoring for compliance with the SMB DDT and PCBs TMDL at OF-SMB-4 in addition to the proposed receiving water monitoring at RW-SMB-2 to ensure that

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
		DDT and PCB loads are accurately estimated for the EWMP area based on representative land uses throughout the J2/J3 area.
<b>Non-Storm Water Outfall Based Monitoring</b>		
Section 5.3		The draft CIMP appears to focus on outfalls within the Santa Monica Canyon subwatershed and Santa Ynez Canyon subwatershed. The revised CIMP must also include Pulga Canyon and Temescal Canyon in the non-stormwater outfall-based screening and monitoring program.
Sections 5 & 10	Part IX.B.2	The draft CIMP states in section 10 that each program of the CIMP will be re-evaluated every two years and that revisions will be made and submitted to the Regional Water Board for approval. Clarify in the revised CIMP that this re-evaluation includes the non-stormwater outfall-based screening and monitoring program such that the program is reassessed within the permit term as required.
Section 5.3 & Table 17	Part IX.C	<p>The draft CIMP states that if non-stormwater discharge reaches the receiving water during dry weather and if E. coli was detected at all 3 screening events, then those outfalls would be considered to have significant non-stormwater discharges. The CIMP should be revised to indicate that outfalls would be considered to have significant non-stormwater discharges if the two criteria are met during <u>more than one</u> screening event, rather than requiring that they are met during all three screening events.</p> <p>Furthermore, each outfall must be visited during all three screening events given the potential for temporal variability in non-stormwater discharges.</p> <p>Finally, the three screening events should be scheduled to capture potential seasonal variability in non-stormwater discharges. Note also that Table 17 contains a redundant row at the bottom, "Timeline."</p>
Section 5.5	Part IX.E	The prioritization process is unclear in the draft CIMP. Section 5.5 suggests that outfalls will be given a "score," but neither Table 17 nor sections 5.3-5.5 explain how a "score" will be calculated. Further, based on the initial field survey described in section 5.3 and Table 16, it appears that there may be only a small number of significant non-stormwater discharges. Therefore all should be prioritized. Clarify in the revised CIMP that this is the intent.
Section 5.8	Part IX.G.4 & IX.G.5	The draft CIMP states that "once non-stormwater discharges are eliminated, monitoring at the outfall will cease. Additionally, if monitoring demonstrates that discharges do not exceed any WQBELs, action levels, or water quality standards for pollutants

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
		<p>identified on the 303(d) list, monitoring will cease at an outfall after the first year".</p> <p>Please clarify that any reduction or elimination of monitoring at a site, or for certain pollutants at a site, must be first requested by the group and then is subject to review and approval by the Regional Water Board.</p>
	Part IX.H.1	The revised CIMP must specify the sampling method(s) for a non-stormwater discharge.
<b>Schedule for CIMP Implementation</b>		
Section 12		<p>The draft CIMP states that 5 of the 7 sites will require construction permits from multiple agencies and installation of fixed autosamplers and appurtenances, which may take up to 18 months.</p> <p>The revised CIMP must clearly indicate when monitoring will commence (wet weather/stormwater and dry weather/non-stormwater) at each of the seven sites (3 receiving water sites and 4 outfall sites). If monitoring at all seven sites cannot begin immediately upon approval, the group must propose a phased schedule for beginning monitoring at each site as soon as possible. Such a schedule should include consideration of sampling using manually composited grab samples until autosamplers can be installed. As per Attachment E of the LA County MS4 Permit, grab samples shall be taken as a combination of a minimum of 3 sample aliquots, taken in each hour of discharge for the first 24 hours of the discharge or for the entire discharge if the storm event is less than 24 hours, with each aliquot being separated by a minimum of 15 minutes within each hour of discharge.</p>
<b>Existing Watershed Monitoring Programs</b>		
Appendix A, Section 3	Parts XIV.L & XVIII.A.7.a	Influent and effluent data collected at the SMURRF must be submitted as part of the CIMP monitoring program on the same schedule as the other data (semi-annual and annual submittals).

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**Enclosure 2 – Comments on Aquatic Toxicity Testing**

**Santa Monica Bay Jurisdictional Group 2 and 3 EWMP Group**

Part XII.G.1. (Page E-30) and Part XII.G.2. (Page E-30) of the Monitoring and Reporting Program states that Permittees shall conduct aquatic toxicity monitoring utilizing the critical life stage chronic toxicity test methods listed. The draft CIMP does not propose use of critical life stage chronic toxicity test methods for assessment of toxicity in wet weather samples and instead proposes use of acute toxicity test methods. This is not acceptable; the appropriate chronic toxicity test method listed in the MRP must be used and both survival and sublethal endpoints must be reported. We suggest the group consult the State Water Resources Control Board 2011 publication, "Implementation Guidance: Toxicity Testing for Stormwater" to gain insight on how to run chronic toxicity tests on wet weather samples.

Part VIII.B.1.c.vi. (Page E-23) and Part VIII.G.1.d. (Page 27) of the Monitoring and Reporting Program states that where the TIE conducted at the downstream receiving water monitoring station was inconclusive then aquatic toxicity shall be monitored at the outfall. The draft CIMP does not propose conducting this required outfall toxicity monitoring.

While development of the proposed Discharge Assessment Plan (DAP) will be useful, it cannot take the place of the required outfall toxicity monitoring following an inconclusive TIE in the receiving water. And, while there may be situations where TIEs cannot be resolved due to non-persistent toxicity and no further action on that sample can be pursued, inconclusive TIEs often result from a lack of following well-defined procedures rather than non-persistent toxicity. As mentioned elsewhere in this comment letter, including pyrethroids in the TIE procedure will reduce the occurrence of inconclusive TIEs as will including chemical testing for Fipronil and its degradates for comparison to U.S. EPA benchmarks.

Part XII.I.1. (Page E-33) of the Monitoring and Reporting Program states that a toxicity test sample is immediately subject to TIE procedures if either survival or sublethal endpoints demonstrate a Percent Effect value equal to or greater than 50% at the Instream Waste Concentration. The draft CIMP does not propose to perform a TIE when at least a 50% sublethal effect is seen but instead proposes to first collect a confirmatory sample two weeks later.

This is not an acceptable approach. The CIMP seems to be implying that chronic toxicity has some inherent non-persistent quality to it that makes the results unreliable. It also implies that chronic toxicity is of lesser importance. Although it would be hard to generalize to all possible situations, the fact that a large number of invertebrates (or fish) living in a receiving water can survive an ambient pollutant concentration but are impacted in terms of growth or reproduction means that the population as a whole will be impacted, and could eventually collapse. Some species living in the receiving water have

very short lifespans and during critical times of the year may be prey for other organisms that will in turn be impacted by their population decline.

**Suggested Special Study:** The 2013 study released by the California Stormwater Quality Association (CASQA) entitled "Review of Pyrethroid, Fipronil and Toxicity Monitoring Data from California Urban Watersheds" reviewed stormwater data from studies conducted during 2005 - 2012 and highlighted the toxicity impacts from use of pesticides not currently required to be monitored for by the MRP. We suggest the group begin monitoring for these chemicals in the receiving water and, in addition, assess toxicity using the 2002 acute toxicity testing protocol (EPA-821-R-02-012) with the amphipod *Hyalella azteca* as the test organism. *H. azteca* is known to be much more sensitive to pyrethroids than is *Ceriodaphnia dubia* while the latter is useful for its sensitivity to OP pesticides. The two species together may also prove to be more useful in detecting toxicity from fipronil. And, should 50% or greater effect be detected in the toxicity test, we suggest a procedure to incorporate pyrethroids into the subsequent TIE be documented (three possible treatments have been identified by researchers, see <http://www.pubfacts.com/detail/20018342/Focused-toxicity-identification-evaluations-to-rapidly-identify-the-cause-of-toxicity-in-environment>). While fipronil does not have a TIE procedure identified currently, chemical testing for the parameter (and degradates) and comparison to U.S. EPA Office of Pesticide Program's aquatic life benchmarks at [http://www.epa.gov/oppefed1/ecorisk\\_ders/aquatic\\_life\\_benchmark.htm](http://www.epa.gov/oppefed1/ecorisk_ders/aquatic_life_benchmark.htm) will aid in determining the cause(s) of toxicity in order to follow up with outfall testing of the parameter(s) with the ultimate goal of removing the source. This approach will also help minimize inconclusive TIE results which would lead to required toxicity testing in the representative upstream outfall(s).

## Santa Monica Bay Jurisdiction 2 & 3 EWMP Group

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