

## Los Angeles Regional Water Quality Control Board

November 21, 2014

Lower San Gabriel River Watershed Management Group  
(See Distribution List)

**REVIEW OF THE LOWER SAN GABRIEL RIVER WATERSHED MANAGEMENT GROUP'S DRAFT COORDINATED INTEGRATED MONITORING PROGRAM, PURSUANT TO PART VI.B AND 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) AND PART VII.B AND ATTACHMENT E, PART IV.B OF THE CITY OF LONG BEACH MS4 PERMIT (NPDES PERMIT NO. CAS004003; ORDER NO. R4-2014-0024)**

Dear Lower San Gabriel River Watershed Management Group:

The Regional Water Board has reviewed the draft Coordinated Integrated Monitoring Program (CIMP) submitted on June 30, 2014 by the Lower San Gabriel River (LSGR) Watershed Management Group (WMG). This 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, in coordination with an approved Watershed Management Program per Part VI.C, a customized monitoring program 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. Customized monitoring programs may be developed on an individual jurisdictional basis, referred to as an Integrated Monitoring Program (IMP), or a on watershed basis, referred to as a CIMP. These programs must be approved by the Executive Officer of the Regional Water Board.

NPDES Permit No. CAS004003 (Order No. R4-2014-0024) authorizes discharges from the MS4 operated by the City of Long Beach (hereafter, Long Beach MS4 Permit). The Long Beach MS4 Permit similarly allows the City of Long Beach to develop either an IMP or CIMP to implement Permit requirements, with the option of collaborating with LA County MS4 Permit Permittees. For simplicity, this letter and its enclosures cite provisions in the LA County MS4 Permit even though the City of Long Beach is a member of the LSGR WMG and is permitted under its own individual Permit.

The Regional Water Board has reviewed the draft CIMP and has determined that, for the most part, the CIMP includes the elements set forth in Part II.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 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 **February 19, 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 LSGR CIMP" with a copy to [Ivar.Ridgeway@waterboards.ca.gov](mailto:Ivar.Ridgeway@waterboards.ca.gov) and [Chris.Lopez@waterboards.ca.gov](mailto:Chris.Lopez@waterboards.ca.gov).

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

Until the Permittees' CIMP is approved by the Executive Officer, the monitoring requirements pursuant to Order No. 01-182 and MRP CI 6948, Order No. 99-060 and MRP CI 8052 and pursuant to approved TMDL monitoring plans shall remain in effect for the Permittees.

If you have any questions, please contact Mr. Chris Lopez of the Storm Water Permitting Unit by electronic mail at [Chris.Lopez@waterboards.ca.gov](mailto:Chris.Lopez@waterboards.ca.gov) or by phone at (213) 576-6674. 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 Necessary Revisions to Draft CIMP
- Enclosure 2 – Comments on Aquatic Toxicity Monitoring
- Lower San Gabriel River WMG Distribution List

cc: John Hunter, John L. Hunter and Associates, Inc.

Los Angeles Regional Water Quality Control Board

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

Lower San Gabriel River Watershed Management Group

CIMP Reference	MRP Element/ Reference* (Attachment E)	Comment and Necessary Revision
<b>Receiving Water Monitoring</b>		
Section 5 (Metals TMDL Monitoring)	Part II.A.2	<p>The draft CIMP indicates in Table 5-1 (page 21) that metals monitoring for the San Gabriel River Metals TMDL will include monitoring of three wet weather events per year instead of the minimum of four events recommended in the TMDL.</p> <p>The frequency of monitoring for metals should be increased to four wet weather events to be consistent with the recommendations listed in the TMDL. Wet-weather monitoring results from the first year may be evaluated to determine whether reducing the frequency to three wet-weather events per year would still provide sufficient data. The Lower San Gabriel River Watershed Management Group may request a reduction in frequency on the basis of this data evaluation.</p> <p>Furthermore, the USEPA TMDL recommends dry weather effectiveness monitoring at the San Gabriel River Estuary. However, the draft CIMP does not mention any Metals TMDL monitoring at the estuary in Table 3-1 (page 11).</p>
Section 5.4 (PCBs)	Part XIV	<p>For water samples taken under the water column monitoring requirement of the Harbor Toxics TMDL, it is unclear whether PCBs will be analyzed by EPA Method 1668C and reported as congeners as noted in Appendix F.</p> <p>Monitoring for PCBs in sediment or water should be reported as the summation of 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. It is preferable samples be analyzed using EPA Methods 8270 or 1668C (as appropriate), and High Resolution Mass Spectrometry.</p>
Section 5.5 (Mercury)	Part XIV	<p>Table 5-7 (page 27) indicates that the EPA Method 245.1 will be used to analyze Mercury. This method is inadequately sensitive. The</p>

CIMP Reference	MRP Element/ Reference* (Attachment E)	Comment and Necessary Revision
		draft CIMP should be revised to use either EPA Method 245.7 or 1631E to ensure sufficiently sensitive minimum levels that are comparable to the water quality criteria.
Section 5 (1 <sup>st</sup> Year Screening)	Part VI.C.1.e and Part VI.D.1.d	<p>Tables 5-1 and 5-2 (pages 21-22) indicate that Table E-2 parameters will be measured at all receiving water sites during the first year. However, the narrative on pages 17-19 only mention E-2 screening for monitoring sites S13 and GR1. The narrative should reflect that all Long-Term Assessment (LTA) receiving water monitoring sites will monitor Table E-2 parameters in their first year of monitoring.</p> <p>Additionally, Tables 5-1 and 5-2 should include and note the appropriate frequencies of analysis for Table E-2 constituents that are detected above the lowest applicable water quality objective during the 1st year of monitoring.</p>
Section 6 (Adaptive Management)	Part VI.C.1 and Part VI.D.1	<p>The draft CIMP notes on page 30 that category 2 water body-pollutant combinations “will be downgraded if data indicates that the pollutant meets delisting criteria.”</p> <p>Furthermore, the draft CIMP notes on page 31 that category 3 water body-pollutant combinations “will be removed from the list of monitored constituents at the site if they are not detected at levels that exceed the minimum, appropriate water quality criteria for a period of two consecutive years.”</p> <p>The CIMP needs to be revised to clarify that any such reduction in monitoring, including elimination of parameters from the monitoring program, would need to be proposed to the Regional Water Board and would be subject to Executive Officer approval.</p>
<b>Outfall Monitoring</b>		
Section 3.2 (Outfall Monitoring Sites)	Part VIII.A.2.a	<p>The MRP requires monitoring of “at least one major outfall per subwatershed (HUC 12) drainage area, within the Permittee’s jurisdiction, or alternate approaches as approved in an IMP or CIMP.”</p> <p>The draft CIMP identifies five HUC 12 drainage areas, but only establishes three outfall monitoring sites. Two sites are located in the “Coyote Creek – San Gabriel River” HUC 12 equivalent area and one site is located in the “Brea Creek – Coyote Creek” HUC 12 equivalent area.</p> <p>The draft CIMP notes on page 14 that “Brea Creek – Coyote Creek” is one of the two major HUC 12 equivalent units in the LSGR, however it should be noted that the majority of “Brea Creek – Coyote Creek” is in Orange County, and only portions of La Mirada</p>

CIMP Reference	MRP Element/ Reference* (Attachment E)	Comment and Necessary Revision
		<p>and Diamond Bar appear to be within the subwatershed. In contrast, the draft CIMP identifies the "La Mirada Creek" HUC 12 equivalent unit as "mid-size," although a larger area of the LSGR group lies within it as compared to the "Brea Creek-Coyote Creek" HUC 12 equivalent.</p> <p>Although the Group has established the NFC1 receiving water site within this area, an outfall monitoring location should also be established for this HUC 12 equivalent unit.</p> <p>The "Lower San Jose Creek" and "Upper San Jose Creek" HUC 12 equivalent units also do not have outfall monitoring sites. The Group has not provided thorough justification for not establishing monitoring stations for each of these areas, and should include outfall monitoring stations at these locations in its revised CIMP or provide further justification (that includes a description of land uses) that the one outfall monitoring site in the City of Diamond Bar is representative of the discharges from the "Lower San Jose Creek" and "Upper San Jose Creek" HUC 12 equivalent units.</p>
Section 3.2 (SW Outfall Monitoring)	Part VIII.A.2.b	<p>The draft CIMP states on page 14 that "[t]he drainage areas of the outfall monitoring sites are representative of a wide variety of land uses within the LLSG including residential, commercial and industrial."</p> <p>However, the draft CIMP does not provide a breakdown of land uses for each of these monitoring sites to support this statement. The Group should include a breakdown of land uses for each outfall monitoring site, a comparison of these land uses to the land uses in the entire watershed area, and an explanation of how these sites are representative.</p>
Section 9 (SW Outfall Monitoring Constituents)	Part VIII.B.1.c.iii	Table 9-1 (page 61) does not include diazinon as a constituent to be monitored at stormwater outfall monitoring sites. However, diazinon is listed on the 303(d) list for Coyote Creek.
Section 10-3 (Maps and Databases)	Part VII.A	Table 10-3 (page 68) indicates the status of basic database and mapping information for the watershed. All of the completed mapping information as listed in Part VII.A of the MRP should be included and submitted in the revised CIMP.

\*Equivalent provisions are also found in Attachment E of Long Beach MS4 Permit

ENCLOSURE 2  
COMMENTS ON AQUATIC TOXICITY TESTING  
LOWER SAN GABRIEL RIVER CIMP

Part XII.G.1. (Page E-30) and Part XII.G.2. (Page E-30) of the Monitoring and Reporting Program state 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 state 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 fipronils and its degradates for comparison to U.S. EPA benchmarks.

Additionally, the toxicity flowcharts do not show the need to proceed to outfall toxicity testing should a TIE of a toxic receiving water sample be inconclusive and instead focus on the response to non-persistent toxicity. We strongly recommend a more cohesive approach whereby Permittees develop a Toxicity Assessment Plan analogous to the Discharge Assessment Plan currently proposed in the CIMP.

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 *Hyaella 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 a representative upstream outfall.

## Lower San Gabriel River Watershed Management Group

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