

Los Angeles Regional Water Quality Control Board

February 6, 2015

Upper San Gabriel River Enhanced Watershed Management Program Group
(See Distribution List)

REVIEW OF THE UPPER SAN GABRIEL RIVER 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 Upper San Gabriel River Enhanced Watershed Management Program Group:

The Regional Water Board has reviewed the draft monitoring program submitted on June 27, 2014 by the Upper San Gabriel River 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 **May 6, 2015**. The revised CIMP must be submitted to losangeles@waterboards.ca.gov with the subject line "LA County MS4 Permit – Revised Upper San Gabriel River EWMP Group CIMP" with a copy to lvar.Ridgeway@waterboards.ca.gov and 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 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 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
 Upper San Gabriel River EWMP Group Distribution List

Los Angeles Regional Water Quality Control Board

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

Upper San Gabriel River Enhanced Watershed Management Program Group

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
General		
Executive Summary, Section 2.3.1, & 2.3.2		<p>The draft CIMP notes that the Group is collaborating with other Watershed Management Groups, including Enhanced Watershed Management Groups, and the LA County Sanitation District for some receiving water monitoring.</p> <p>The Group must provide a copy of the final agreement of collaboration among the Group, LA County Sanitation District, and the other Permittees (e.g., ESGV Group, RH/SGR Group, and LSGR Group) under the LA County MS4 Permit to conduct the required monitoring through a CIMP per Part VI.B-D of Attachment E.</p>
	Section 12	<p>The draft CIMP notes that TMDL receiving water and stormwater outfall monitoring is being implemented using a phased approach with 1 TMDL receiving water site and 2 new stormwater outfall sites being installed and monitored each year from the 2015-2016 to 2017-2018 fiscal year. The revised CIMP should specify which TMDL receiving water sites and stormwater outfalls are proposed for each fiscal year. Additionally, the revised CIMP must provide further justification for the pace of phasing and how the phasing will result in adequate data to measure progress toward achieving the interim deadline of September 30, 2017 established in the Implementation Plan for the San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (SGR Metals TMDL).</p>
Receiving Water Monitoring		
Section 1.2 & Table 2-1	Part II.E	<p>As per the SGR Metals TMDL, the wet weather TMDLs for all upstream reaches and tributaries of Coyote Creek and the dry weather TMDL for Coyote Creek is applicable to the Group due to the MS4 discharges from the LA County unincorporated area located upstream of Coyote Creek. The revised CIMP must address the Coyote Creek metals TMDLs as applicable to the USGR Group. Table 2-1 of the CIMP must include the required monitoring for Coyote Creek per the TMDL.</p>
Section 9.1 & Attachment C	Part VI.C.b	<p>The draft CIMP defines wet weather in Attachment C as “when the flow of the receiving water body has flow that is at least 20 percent</p>

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
Section C-2.1.4		<p>greater than its base flow or as defined by effective TMDLs within the watershed". The revised CIMP should define wet weather under Section 9.1 of the CIMP and either reference the applicable TMDL wet weather definition or, alternatively, provide support for an alternate definition of wet weather that is consistent with the TMDL definition. For the SGR Metals TMDL, wet weather is defined for SGR Reach 2 and Coyote Creek in footnote 2 of Attachment P, Part A.2 of the LA County MS4 Permit.</p>
Section 1.2		<p>In Section 1.2, the draft CIMP states, "[a]s recognized by the footnote in Attachment K-4 of the Permit, the Group Members have entered into an Amended Consent Decree with the United States and the State of California, including the Regional Board, pursuant to which the Regional Board has released the Group Members from responsibility for toxic pollutants in the Dominguez Channel and the Greater Los Angeles and Long Beach Harbors."</p> <p>This statement misinterprets the Regional Water Board's findings. Footnote 1 to Table K-4 of the LA County MS4 Permit states, "[t]he requirements of this Order to implement the obligations of this TMDL do not apply to a Permittee to the extent that it is determined that the Permittee has been released from that obligation pursuant to the Amended Consent Decree entered in United States v. Montrose Chemical Corp., Case No. 90-3122 AAH (JRx)." As stated in the responses to comments received on the Dominguez Channel and Greater Harbor Waters Toxic Pollutants TMDL, "...primarily one pollutant, DDT, is associated with the Superfund site and also addressed by the TMDL. The TMDL addresses numerous pollutants and utilizes a different process than Superfund. The other pollutants – heavy metals, PAHs, PCBs and other legacy pesticides are not within Superfund's focus at the Montrose OU2 Site..."</p> <p>Furthermore, the WQBELs in Attachment N, Part E of the LA County MS4 Permit are for ongoing discharges from the MS4, not for the historic contamination of the bed sediments. Therefore, the statement in the draft CIMP incorrectly concludes that the aforementioned Consent Decree releases MS4 Permittees from any obligation to implement the WQBELs in the MS4 permits. This statement in the CIMP must be revised consistent with the comment above.</p>
Table 2-1		<p>Constituents on Table 2-1 of the draft CIMP such as Total and Dissolved Nickel, Diazinon, and Alpha-Endosulfan are listed but do not specify a monitoring frequency. The revised CIMP should</p>

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
		specify a monitoring frequency or remove the empty columns if it was a typographical error.
Section 2.4	Part II.A.2	<p>The draft CIMP proposes monitoring for 3 wet-weather events annually for the wet-weather TMDL effectiveness monitoring. However, the revised CIMP must include monitoring during 4 wet-weather events annually as per the US EPA recommendation in the SGR Metals 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 Group may request a reduction in wet-weather TMDL effectiveness monitoring frequency on the basis of this data evaluation.</p> <p>In addition, US EPA also recommends dry-weather TMDL effectiveness monitoring. The revised CIMP should include dry-weather TMDL effectiveness monitoring at a frequency per US EPA recommendations for Coyote Creek and San Jose Creek.</p>
Storm Water Outfall Based Monitoring		
Section 3	Part VII.A	The draft CIMP identifies some maps and database components as pending. Information is still being collected for elements in Part VII.A.4, VII.A.8-10, VII.A.11.a, and VII.A.11.c-f of Attachment E of the LA County MS4 Permit. 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.
Section 4 & Table 4-9	Part VIII.B.1.c.vi & VIII.B.1.d	The revised CIMP Table 4-9 should include a row that specifies the monitoring frequency for pollutants identified in a Toxicity Identification Evaluation (TIE) conducted at the downstream receiving water monitoring station during the most recent sample event. If the TIE conducted on the receiving water sample was inconclusive, Table 4-9 in the CIMP should include aquatic toxicity. The revised CIMP Table 4-9 should also include a row that specifies a monitoring frequency of 3 wet weather events for other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station.
Section 9.1	Part VIII.C.1	The revised CIMP should specify that stormwater samples will be collected during the first 24 hours of the stormwater discharge or for the entire stormwater discharge if it is less than 24 hours as per Part VIII.C of Attachment E of the LA County MS4 Permit.
Attachment B, F, Section 4.2, & Table 4-2	Part VIII.A	As an alternative to monitoring one outfall per HUC 12 drainage area, the Group proposes to monitor one major outfall for each Permittee in the Group. The draft CIMP gives relative land use

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
		<p>breakdowns in percentages for 6 outfall catchment areas and each Permittee in the Group.</p> <p>As per Table 4-2 of the draft CIMP, 5 of 6 outfall catchment areas slightly misrepresent residential and commercial/industrial land use, most notably for the City of Glendora. In addition, some of the outfall catchment areas incorporate land use from other jurisdictions such as City of Industry (21% City of La Puente) and City of Covina (7% LA County).</p> <p>The revised CIMP should consider using alternative outfalls listed in Attachment F if the outfall catchment area is more representative of land use for each Permittee. In addition, the revised CIMP should give land use breakdowns in percentages for the potential/alternative outfall catchment areas listed in Attachment F of the CIMP.</p> <p>If the outfalls listed in Table 4-2 of the CIMP best represent the range of land uses and characteristics of EWMP area compared to the alternative outfalls provided in Attachment F of the CIMP, the revised CIMP should briefly provide justification.</p>
Attachment C Table C-2, C-6, & C-7	Attachment D Part III.B & Attachment E Part III.G	The draft CIMP states that LACFCD will test Mercury (Hg) with method EPA 245.1 for water and LACSD will use method EPA 245.7 for sediment (Tables C-6 and C-7, respectively). The Group proposes testing Mercury (Hg) with method EPA 1631 for water (Table C-2). To test for Mercury, the Group and LACFCD must use lower level methods EPA 245.7 or 1631E for water and for sediment. (Method 1631E is the revised version of the original Method 1631.)
Non-Storm Water Outfall Based Monitoring		
Section 5.2	Part IX.C.1	The draft CIMP states criteria that will be used to determine significant non-stormwater outfall discharge. The revised CIMP should be more specific on how a significant non-stormwater discharge will be determined. In particular, it should provide greater specificity on thresholds for field measurements, including flow and water quality data that will be used to determine whether the non-stormwater discharge is significant. The criterion of discharges that have caused or have the potential to cause overtopping of downstream diversions should be removed, since according to the GIS metadata file, there are no low flow diversions in the EWMP area. Additionally, the criterion of "accessibility and safety" is not an appropriate criterion for determining the significance of a non-stormwater discharge. If

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
		accessibility and safety are concerns, alternative criteria based on visual observation alone may be employed and source identification should still proceed, if appropriate based on the alternate criteria. If the source identification is inconclusive and monitoring is necessary, the Group may document that the outfall is inaccessible and may instead sample from a nearby manhole.
Appendix C Section C-2.1.4	Parts VIII.C & IX.H	The draft CIMP discusses sampling procedures in Appendix C and specifically discusses conditions for wet and dry weather monitoring of receiving water in Section C-2.1.4. The revised CIMP should also clearly specify the sampling methods for stormwater and non-stormwater outfall based monitoring as per Parts VIII.C and IX.H of Attachment E in the LA County MS4 Permit, including additional justification for grab samples, if proposed for non-stormwater outfall based sampling.

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Enclosure 2 – Comments on Aquatic Toxicity Testing

Upper San Gabriel River Enhanced Watershed Management Program Group

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 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 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).

Upper San Gabriel River EWMP Group

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