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## Los Angeles Regional Water Quality Control Board

November 21, 2014

Los Angeles River Upper Reach 2 Watershed Management Group  
(See Distribution List)

**REVIEW OF THE LOS ANGELES RIVER UPPER REACH 2 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)**

Dear Los Angeles River Upper Reach 2 Watershed Management Group:

The Regional Water Board has reviewed the draft Coordinated Integrated Monitoring Program (CIMP) submitted on June 26, 2014 by the Los Angeles River Upper Reach 2 (LAR UR2) Watershed Management Group. 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.

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 LAR UR2 CIMP" with a copy to [Ivar.Ridgeway@waterboards.ca.gov](mailto:Ivar.Ridgeway@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.

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

If you have any questions, please 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
- Los Angeles River Upper Reach 2 Watershed Management Group Distribution List

**Enclosure 1 to November 20, 2014 Letter Regarding the Los Angeles River Upper Reach 2  
Watershed Management Area Draft Integrated Monitoring Program  
Summary of Comments and Required Revisions to the Draft Integrated Monitoring Program**

CIMP Reference	MRP Element/ Reference (Attachment #)	Comment and Necessary Revision
Quality Assurance Project Plan Pages 9-11	Att. D Part III page D-5	<p>The draft CIMP does not include the sampling analysis methods specified in Attachment D (<b><i>test procedures approved under 40 CFR Part 136 for the analysis of pollutants unless another test procedure is required under 40 CFR subchapters N or O</i></b>). The draft CIMP notes that several of the laboratories under consideration to conduct the analyses reported difficulties in achieving the Permit-identified MDLs for standard pollutants. The draft CIMP must include the sampling analysis methods specified in Attachment D and Permittees must ensure that the laboratory(ies) selected to conduct the sample analysis are certified and can achieve the Permit-identified MDLs.</p>
Section 2	TMDL Monitoring	<p>The Los Angeles River Upper Reach 2 WMP Group does not include receiving water monitoring at the mouth of the Los Angeles River as required by the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL (Harbor Toxics TMDL).</p> <p>Los Angeles River Watershed responsible parties identified in effective metals TMDLs for the Los Angeles River are responsible for conducting water and sediment monitoring above the Los Angeles River Estuary to determine the River's contribution to the impairments in the Greater Harbor waters. The monitoring required above the Los Angeles River Estuary includes:</p> <ul style="list-style-type: none"> <li>• <b>Water Column Monitoring</b> Water samples and total suspended solids samples shall be collected at, at least one site during two wet weather events and one dry weather event each year. The first large storm event of the season shall be included as one of the wet weather monitoring events. Water samples and total suspended solid samples shall be analyzed for metals, DDT, PCBs, and PAHs. Sampling shall be designed to collect sufficient volumes of suspended solids to allow for analysis of the listed pollutants in the bulk sediment.</li> </ul> <p>General water chemistry (temperature, dissolved oxygen, pH, and electrical conductivity) and a flow measurement shall be required at each sampling event. General chemistry measurements may be taken in the laboratory immediately following sample collection if auto samplers are used for sample collection or if weather conditions are unsuitable for field measurements.</p> <ul style="list-style-type: none"> <li>• <b>Sediment Monitoring</b> For sediment chemistry, sediment samples shall be collected at, at least one site every two years for analysis of general sediment quality</li> </ul>

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		<p>constituents and the full chemical suite as specified in SQO Part 1. All samples shall be collected in accordance with SWAMP protocols.</p> <p>The details including sampling location and all methods must be specified in the LAR UR2 WMG's revisions to its proposed Coordinated Integrated Monitoring Program.</p> <p>One option is for the LAR UR2 WMG to coordinate with another Watershed Management Program group to meet this requirement.</p>
Quality Assurance Project Plan Pages 9-11	Analytical Procedures	<p>Note that for mercury, Method 245.7 or 1631E should be utilized (not 245.1) to get sufficiently sensitive minimum levels for analytical results to be compared with the water quality objective.</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. It is preferable samples be analyzed using EPA Methods 8270 or 1668C (as appropriate), and High Resolution Mass Spectrometry.</p> <p>The Regional Water Board also recommends that the LAR UR2 WMG conduct sampling for Suspended-Sediment Concentration (SSC) in addition to TSS.</p>
Section 5	Att. E Part VI.D.1.a page E-16	The draft CIMP did not specify that one of the dry-weather monitoring event would occur during the month with the historically lowest instream flows, or where instream flow data are not available, during the historically driest month. The draft CIMP needs to be revised to comply with this requirement.
Section 4	Att. E Parts VIII.B.1.b.i & VIII.B.1.b.ii page E-22	The draft CIMP does not clearly state what wet-weather conditions trigger stormwater outfall monitoring. It is assumed that stormwater outfall monitoring is triggered by the same wet-weather condition that triggers wet-weather receiving water monitoring and will be coordinated to occur in conjunction with wet-weather receiving water monitoring. This needs to be stated.
Section 4	Att. E Part VIII.B.1.b.iii page E-22	Similarly, the draft CIMP does not clearly state what dry-weather conditions trigger non-stormwater outfall monitoring. It is assumed that non-stormwater outfall monitoring is triggered by the same dry-weather condition that triggers dry-weather receiving water monitoring and will be coordinated to occur in conjunction with dry-weather receiving water monitoring. This needs to be stated.
Section 4	Att. E Part VIII.C.1	The draft CIMP did not specify that stormwater outfall samples will be collected during the first 24 hours of the storm event or for the entire

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	page E-23	storm event if it is less than 24 hours. The revised CIMP needs to include this information.
Section 5	Att. E Part IX.C.1 pp. E-24 & E-25	The draft CIMP proposes to use a ranking process applied to outfalls with non-stormwater discharges to define, in part, those outfalls with significant non-stormwater discharges. However, identifying only the top 20% of outfalls per the criteria in Table 5-1 as outfalls with significant non-stormwater discharges is not acceptable. However, the Permittees may instead choose to use this ranking process to prioritize the scheduling of source identification and monitoring for outfalls with significant non-stormwater discharges.
Section 5	Att. E Part IX.C.1 pp. E-24 & E-25	The draft CIMP needs to be revised to identify the specific parameters that will be analyzed during the non-stormwater outfall screening and which will be used, as described in Table 5-1, to identify significant non-stormwater discharges. In addition, the draft CIMP needs to be revised to clarify what constitutes a non-stormwater discharge reaching the receiving water (i.e., the non-stormwater discharge reaches the main channel).
Section 5	Att. E Part IX.E.2	The schedule to complete investigation of outfalls with significant non-stormwater discharge is too long. Permittee are required to develop a source identification schedule based on the prioritized list of outfalls exhibiting significant non-stormwater discharges. The schedule shall ensure that source investigations are conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of the LA County MS4 Permit and 100% of the outfalls in the inventory within 5 years of the effective date. While Permittees can request an alternative schedule, the timeframe in the draft CIMP is too long. An alternate schedule under which completion of investigations of 25% of the outfalls is done by December 28, 2016 and 100% of the outfalls with significant non-stormwater discharge by December 28, 2017.
Section 5	Att. E Part IX.H.1 page E-28	The draft CIMP needs to include clear criteria for, consistent with Permit requirements, when non-stormwater discharges should be monitored (e.g., during days when precipitation is < 0.1 inch and those days not less than 3 days after a rain day).
Section 5	Att. E Part IX.H.2 page E-28	The draft CIMP does not specify that flow-weighted composite samples will be taken for a non-stormwater discharge using a continuous sampler, or be taken as a combination of a minimum of 3 sample aliquots, taken in each hour during a 24-hour period. The sampling protocol for non-stormwater monitoring needs to be included in the revised CIMP.
Section 2.4 and Section 4.3	Toxicity Monitoring	Toxicity monitoring is mentioned in the draft CIMP but there is no specific guidance included on how toxicity testing is to be conducted. The draft CIMP needs to be revised to include information on how toxicity testing is to be conducted. See Enclosure 2.
Section 11	Att. E Part VI.C.1.c	The draft CIMP notes that monitoring at the one receiving water monitoring site in Los Angeles River will commence within 30 days

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	page E-15	after the approval of required permits. The draft CIMP states that, it is anticipated that the permitting and installation process may take a minimum of 18 months. Monitoring at this site should be started using portable equipment no later than July 1, 2015, so that monitoring data are available for the 2015-16 storm year.
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ENCLOSURE 2  
COMMENTS ON AQUATIC TOXICITY TESTING  
LOS ANGELES RIVER UPPER REACH 2 CIMP

Part XII.G (Pages E-30 through E-32) 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 state the toxicity testing species and methods to be used, and the approach to be used to screen for the most sensitive test species. This must be corrected.

**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.

## Los Angeles River Upper Reach 2 Distribution List

Name	City	Email Address
Terry Rodrigue	Bell	<a href="mailto:trodrigue@cityofbell.org">trodrigue@cityofbell.org</a>
Doug Willmore	Bell	<a href="mailto:dwillmore@cityofbell.org">dwillmore@cityofbell.org</a>
Philip Wagner	Bell Gardens	<a href="mailto:pwagner@bellgardens.org">pwagner@bellgardens.org</a>
Chau Vu	Bell Gardens	<a href="mailto:cvu@bellgardens.org">cvu@bellgardens.org</a>
Gina Nila	Commerce	<a href="mailto:ginan@ci.commerce.ca.us">ginan@ci.commerce.ca.us</a>
Aaron Hernandez-Torres	Cudahy	<a href="mailto:ahernandez@cityofcudahyca.gov">ahernandez@cityofcudahyca.gov</a>
Jose Pulido	Cudahy	<a href="mailto:jpulido@cityofcudahyca.gov">jpulido@cityofcudahyca.gov</a>
Desi Alvarez	Huntington Park	<a href="mailto:dalvarez@huntingtonpark.org">dalvarez@huntingtonpark.org</a>
Angela George	LA County, DPW	<a href="mailto:ageorge@dpw.lacounty.gov">ageorge@dpw.lacounty.gov</a>
Oscar Magana	Maywood	<a href="mailto:oscar.magana@cityofmaywood.org">oscar.magana@cityofmaywood.org</a>
Andre Dupret	Maywood	<a href="mailto:andre.dupret@cityofmaywood.org">andre.dupret@cityofmaywood.org</a>
Cladia Arellano	Vernon	<a href="mailto:carellano@ci.vernon.ca.us">carellano@ci.vernon.ca.us</a>
Kevin Wilson	Vernon	<a href="mailto:kwilson@ci.vernon.ca.us">kwilson@ci.vernon.ca.us</a>
Dr. Gerald Greene	CWE	<a href="mailto:ggreene@cwecorp.com">ggreene@cwecorp.com</a>