



Los Angeles Regional Water Quality Control Board

March 6, 2019

Mr. Edward Medrano City Manager 1700 W. 162nd St., Room 112 P.O. Box 47003 Gardena, CA 90247

APPROVAL OF REQUEST TO MODIFY DIRECTIVE TO COMMENCE BASELINE MONITORING PURSUANT TO THE MONITORING AND REPORTING PROGRAM AS SET FORTH IN ATTACHMENT E (LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT - NPDES PERMIT NO. CAS004001; ORDER NO. R4-2012-0175)

Dear Mr. Medrano:

Attachment E of the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit (NPDES Permit No. CAS004001; Order No. R4-2012-0175) (hereafter, LA County MS4 Permit) sets forth the monitoring and reporting program requirements for Permittees.

On October 20, 2016, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) issued a letter to the City of Gardena (City) directing it to commence baseline monitoring. The letter set forth monitoring and reporting provisions for the City to comply with. On January 6, 2017, the Los Angeles Water Board issued a letter to the City modifying the monitoring and reporting directive issued on October 20, 2016. This modification was made pursuant to the City's request and Los Angeles Water Board's review.

On October 15, 2018, the City submitted another request for modification of its monitoring and reporting directive based on a teleconference between the Los Angeles Water Board and the City on October 8, 2018. In consideration of our teleconference and your letter, the Board has agreed to revise the City's baseline monitoring requirements previously specified in our October 20, 2016 and January 6, 2017 letter. In summary, the Board has made the following modifications:

- Monitoring site S28 is eliminated from the list of the City's monitoring sites. If necessary, the City will obtain relevant data from monitoring site S28.
- The City's monitoring locations are modified and listed in Table 1 of Enclosure 1 and mapped in Figure 1 of Enclosure 2.

IRMA MUÑOZ, CHAIR | DEBORAH SMITH, EXECUTIVE OFFICER

 The constituents the City is required to sample for in the water column are modified based on the current 2014/2016 303(d) list¹. These constituents are listed in Table 2 of Enclosure 1.

This letter, which reiterates requirements in the prior directive dated October 26, 2016, as modified on January 6, 2017 and includes the modifications listed above, shall now serve as the City's directive for monitoring and reporting. The City shall monitor and report pursuant to Attachment E of the LA County MS4 Permit, and as described in Enclosure 1 (Monitoring Requirements), Enclosure 2 (Map of Monitoring Locations), and Enclosure 3 (Aquatic Toxicity Monitoring Requirements). Enclosures 1, 2, and 3 contain the baseline monitoring requirements² specified in Attachment E of the LA County MS4 Permit. These baseline monitoring requirements include the elements set forth in Attachment E, Part II.E of the LA County MS4 Permit and further detailed in Parts V - XIII: receiving water monitoring during wet and dry weather, stormwater outfall-based monitoring, non-stormwater outfall-based screening and monitoring, and special studies. The City is also required to maintain a database for tracking each new development and re-development subject to the requirements of Part VI.D.6 of the LA County MS4 Permit per Attachment E, Part X.

The monitoring locations in Table 1 of Enclosure 1 and in Figure 1 of Enclosure 2 were selected consistent with criteria in Attachment E, Parts VI – IX and XI – XII of the LA County MS4 Permit.³ Enclosure 1 also identifies Total Maximum Daily Load (TMDL) compliance monitoring that the City is required to conduct per Attachment E and Attachment N Part E (Dominguez Channel and Greater Harbor Waters Toxic Pollutants TMDL) of the LA County MS4 Permit. Per a Memorandum of Agreement effective as of December 18, 2018 (Enclosure 4), the City will cost-share with the Dominguez Channel Coordinated Integrated Monitoring Program (CIMP) on Harbor Toxics monitoring, therefore, fulfilling these requirements.

Additionally, the City shall immediately implement a non-stormwater outfall-based screening and monitoring program, as required in Attachment E Part IX of the LA County MS4 Permit. At the time of screening, the City shall also note if the flap-gate at the outfall is open or closed. If open, the City shall estimate and record the approximate flow rate of the non-stormwater discharge and, if closed, the City shall record whether there is evidence of recent non-storm water discharge at the outfall (e.g., water/oil staining, algae growth, debris). The non-stormwater outfall-based screening and monitoring program must use one of the following thresholds for field measurements to determine whether the non-stormwater discharge is significant:

1. Observed flow greater than a garden hose flow (>10 gpm), OR

https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml

¹ Based on the 2014/2016 303(d) list, ammonia, chlordane, and dieldrin are delisted from the 303(d) list. The final 2014/2016 303(d) list is available at:

² Baseline monitoring requirements are those monitoring requirements set forth in Attachment E that a Permittee is subject to where the Permittee does not have an approved IMP or CIMP.

³ Stormwater discharges from the MS4 may be monitored at outfalls or alternative access points such as manholes at the Permittee's jurisdictional boundary. The drainage(s) to the selected outfall(s) or alternative access point(s) must be representative of the land uses within the Permittee's jurisdiction. (Attachment E Part VIII.A of the LA County MS4 Permit)

 Evidence that the non-stormwater discharge reaches the receiving water during dry weather and laboratory analysis for TSS shows that TSS exceeds the Reporting Limit of 2.0 mg/L⁴ in the non-stormwater discharge.

The City is required to screen each of its MS4 outfalls at least 3 times within the term of the current Permit in order to determine the presence of significant non-stormwater discharge. Please note, per the October 20, 2016 letter, the City was required to complete the screening and, based on screening, identify all of its MS4 outfalls that have significant non-stormwater discharges, no later than May 19, 2017. If the City detects significant non-stormwater discharges at an outfall two or more times, it shall monitor that outfall thereafter as per Attachment E, Part IX.G-H of the LA County MS4 Permit. The City shall take grab samples from the outfalls where flow is observed. If it is not possible to sample at the outfall, the City shall take grab samples from a manhole immediately upstream of the outfall.

The City shall demonstrate compliance with Receiving Water Limitations pursuant to Part V.A.1 and all applicable interim and final water quality-based effluent limitations in Part VI.E and Attachment N (Part E) pursuant to Part VI.E.2.d.i.(1)-(3) and/or Part VI.E.2.e.i.(1)-(3) in the LA County MS4 Permit.

Accordingly, the City must commence monitoring as described herein (including Enclosures 1 through 3) immediately. Please note that the City is responsible for complying with all LA County MS4 Permit reporting provisions included in:

- Attachment E, Parts XIV to XVIII;
- Attachment E, Part XIX.C, "Reporting Requirements for Dominguez Channel and Greater Harbors Waters WMA TMDLs;" and
- Attachment D. Parts IV. V. and VII.A.

Finally, the City is also responsible for complying with the requirements below pertaining to Annual Reporting.

Annual Reporting

Pursuant to Attachment E, Part XVIII of the LA County MS4 Permit, the City's Annual Report shall provide an Integrated Monitoring Report that summarizes all identified exceedances of:

- outfall-based stormwater monitoring data,
- wet weather receiving water monitoring data,
- dry weather receiving water monitoring data, and
- non-stormwater outfall monitoring data

against all applicable receiving water limitations, water quality-based effluent limitations, nonstorm water action levels, and aquatic toxicity thresholds as defined in Attachment E. All sample results that exceed one or more applicable thresholds shall be readily identified.

⁴ See SMAMP 2015 Revised Freshwater Reporting Limits. Conventional Parameters in Freshwater: Aqueous Solids. http://www.waterboards.ca.gov/water_issues/programs/swamp/2015_revised_limits.shtml (Accessed on 10/14/16).

Additionally, the City shall indicate which non-stormwater field measurement thresholds were used to determine a significant non-stormwater discharge in the Annual Report.

Semi-Annual Reporting

As described in the September 6, 2018 Investigative Order R4-2018-0121, and consistent with the requirements in Attachment E, Parts XIV.L and XV of the LA County MS4 Permit, the City shall submit semi-annual monitoring reports by December 15 and June 15 each year. The December 15 report shall contain the results from samples collected between January 1 and June 30 of that year, while the June 15 report shall contain the results from samples collected between July 1 and December 31 of the previous year. Each report shall contain the five items listed on page 5 of the Investigative Order.

If you have any questions, please contact Mr. Ali Rahmani of the Storm Water Permitting Unit by electronic mail at Alireza.Rahmani@waterboards.ca.gov or by phone at (213) 576-6692. Alternatively, you may also contact Mr. Ivar Ridgeway, Chief of the Storm Water Permitting Unit, by electronic mail at lvar.Ridgeway@waterboards.ca.gov or by phone at (213) 620-2150.

Sincerely,

Deborah Smith Executive Office

cc: Joseph Cruz, City of Gardena

Gerald Greene, CWE

Enclosures: Enclosure 1 – Monitoring Requirements

Enclosure 2 – Map of Monitoring Requirements

Enclosure 3 - Memorandum from Executive Officer to LA County MS4

Permittees Clarifying Aquatic Toxicity Monitoring Requirements

Enclosure 4 – Memorandum of Agreement for Cost Sharing for Implementation

of Dominguez Channel CIMP





Los Angeles Regional Water Quality Control Board

Enclosure 1 – Revised Monitoring Requirements City of Gardena

Enclosure 1 contains monitoring locations and monitoring requirements specified in Attachment E of the LA County MS4 Permit, including receiving water monitoring during wet and dry weather, stormwater outfall-based monitoring, non-stormwater outfall-based screening and monitoring, and aquatic toxicity monitoring. Enclosure 1 also identifies TMDL compliance monitoring that the City is required to conduct per Attachment E and Attachment N Part E (Dominguez Channel and Greater Harbor Waters Toxic Pollutants TMDL) of the LA County MS4 Permit. Furthermore, Attachment E Part VI.C-D, Part VIII.B, and Part IX.G of the LA County MS4 Permit require monitoring for 303(d) listed pollutants. Because the City of Gardena discharges to a 303(d) listed waterbody (Dominguez Channel and the Dominguez Channel Estuary), it must monitor these pollutants.

Table 1. City of Gardena Required Monitoring Locations¹

Station/Site ID	Description	Waterbody	Latitude	Longitude	Details
FS3	Stormwater – Outfall TMDL - Outfall	Dominguez Channel	33.901836	-118.324964	Rosecrans Avenue
FS4	Stormwater – Outfall TMDL - Outfall	Dominguez Channel	33.872029	-118.298876	Normandie Avenue
R1	Receiving Water TMDL	Dominguez Channel Estuary	33.8710	-118.2906	(Low Flow) Channel East of Normandie Avenue

¹All of the monitoring locations in Table 1 (above) and Enclosure 2 (Map of Monitoring Locations) were selected consistent with criteria in Attachment E, Parts VI – IX of the LA County MS4 Permit. Some of the locations in Table 1 (FS3 and FS4) were also proposed by the City of Gardena in their final Integrated Monitoring Program (IMP) submitted to the Los Angeles Water Board on April 21, 2016.

Table 2. City of Gardena Monitoring Requirements

	Annual Frequency (number wet events/number dry events) Dominguez Channel Watershed ²		
Constituent	Receiving Water ³ TMDL ⁴	Stormwater ⁵ FS3/FS4	Non- Stormwater ⁶
Pollutants identified in Attachment E Table E-2 of the LA County MS4 Permit	1/17	3/0 ⁸	0/49
Aquatic Toxicity 10	2/1 ¹¹	12	13
Total Suspended Solids (TSS)	3/2	3/0	0/4
Flow	3/2	3/0	0/4
Hardness	3/2	3/0	0/4
pH	3/2	3/0	0/4
Dissolved Oxygen	3/2	3/0	0/4
Temperature	3/2	3/0	0/4
Specific/Electrical Conductivity	3/2	3/0	0/4
E. coli	3/2	3/0	0/4
Copper, total recoverable	3/2	2/0 ¹⁴	0/115
Lead, total recoverable	3/2	2/0 ¹⁶	0/117
Zinc, total recoverable	3/2	2/0 ¹⁸	0/119

² In addition to Attachment N Part E.2.a.ii, samples of non-stormwater collected from outfalls (sites FS3 and FS4) during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria (for copper, lead, and zinc) provided in the California Toxics Rule (CTR) are achieved (see Attachment N Part E.3.a.ii, footnote 6 of the LA County MS4 Permit).

³ Monitoring shall occur as per Attachment E Part VI.B-C of the LA County MS4 Permit. Dry weather monitoring shall be conducted in July, the historically driest month.

⁴ Monitoring for the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL for Dominguez Channel and Dominguez Channel Estuary shall be conducted at sites FS3 and FS4 for pollutants in the water column and in bulk sediment and at site R1 for pollutants in fish tissue and bed sediment.

⁵ Monitoring and sampling shall occur as per Attachment E Part VIII.B-C of the LA County MS4 Permit.

⁶ Sampling shall occur as per Attachment E Part IX.H of the LA County MS4 Permit.

⁷ Wet weather receiving water Table E-2 constituents monitoring requirements per Attachment E Part VI.C.1.e and dry weather receiving water Table E-2 constituents monitoring requirements per Attachment E Part VI.D.1.d of the LA County MS4 Permit.

⁸ Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.C.1.e (Attachment E Part VIII.B.1.d) of the LA County MS4 Permit.

⁹ Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.D.1.d (Attachment E Part IX.G.1.e) of the LA County MS4 Permit.

¹⁰ Aquatic toxicity shall be monitored in accordance with Part XII of Attachment E, and as detailed in the Los Angeles Regional Board August 7, 2015, Memorandum titled "Clarification Regarding Follow-up Monitoring Requirements in Response to Observed Toxicity in Receiving Waters Pursuant to the Monitoring & Reporting Program (Attachment E) of the Los Angeles County MS4 Permit (Order No. R4-2012-0175)".

¹¹ Minimum wet weather receiving water monitoring requirements per Attachment E Part VI.C.1.d.vi, and minimum dry weather receiving water monitoring requirements per Attachment E Part VI.D.1.c.vi of the LA County MS4 Permit.

¹² Minimum storm water outfall based monitoring requirements per Attachment E Part VIII.B.1.c.vi of the LA County MS4 Permit

¹³ If the discharge exhibits aquatic toxicity, then a Toxicity Identification Evaluation (TIE) shall be conducted per Attachment E Part IX.G.1.d of the LA County MS4 Permit.

¹⁴ Analyzed in the water column and suspended sediment.

¹⁵ Analyzed at FS3 and FS4 in the water column and suspended sediment.

¹⁶ Analyzed in the water column and suspended sediment.

¹⁷ Analyzed at FS3 and FS4 in the water column and suspended sediment.

¹⁸ Analyzed in the water column and suspended sediment.

¹⁹ Analyzed at FS3 and FS4 in the water column and suspended sediment.

Table 2. City of Gardena Monitoring Requirements (continued)

	Annual Frequency (number wet events/number dry events) Dominguez Channel Watershed ²			
Constituent	Receiving Water ³ TMDL ⁴	Stormwater ⁵ FS3/FS4	Non- Stormwater ⁶	
	R1			
PCBs ²⁰		2/0 ²¹		
Total PAHs ²²		2/0 ²³		
Total DDT ²⁴		2/0 ²⁵		
Benzo[a] Pyrene (3,4-Benzopyrene -7-d)		2/0 ²⁶		
Benzo[a] Anthracene		2/0 ²⁷		
Chrysene (C1-C4)		2/0 ²⁸		
Phenanthrene		2/0 ²⁹		
Pyrene		2/0 ³⁰		
Non-Stormwater Action Levels (ALs) ³¹			0/4	
Sediment Monitoring	32			
Fish Tissue Monitoring	33	Vi. 191-2-1-2		

²⁰ High Resolution (EPA 1668); 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 (SWAMPs) Quality Assurance Program Plan (page 72 of Appendix C).

21 Analyzed in the water column and suspended sediment.

²² Total PAHs include but are not limited to: acenaphthene, anthracene, biphenyl, naphthalene, 2,6-dimethylnaphthalene, fluorene, 1-methylnaphthalene, 2-methylnaphthalene, 1-methylphenanthrene, phenanthrene, benzo(a)anthracene, benzo(a)pyrene, benzo(e)pyrene, chrysene, dibenz(a,h)anthracene, fluoranthene, perylene, and pyrene.

²³ Analyzed in the water column and suspended sediment.

²⁴ High Resolution (EPA 1699); DDT is defined as the sum of 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT.

²⁵ Analyzed in the water column and suspended sediment.

²⁶ Analyzed in the water column and suspended sediment.

³⁰ Analyzed in the water column and suspended sediment.

³¹ Non-stormwater action level monitoring pursuant to Attachment G Part III of the LA County MS4 Permit. The following constituents shall be analyzed: pH, hardness, E. coli, total recoverable cyanide, total recoverable copper, total recoverable lead, total recoverable mercury, and total recoverable selenium. For those constituents that are also required to be sampled per the Harbor Toxics TMDL, the one dry weather event used to meet the TMDL monitoring requirement may be used to fulfill one of the four sampling events for each of the non-stormwater outfall/field screening points, FS3 and FS4.

³² Refer to Table 3. Sediment and Fish Tissue Monitoring Requirements.

³³ Refer to Table 3. Sediment and Fish Tissue Monitoring Requirements.

Table 3. Sediment and Fish Tissue Monitoring Requirements³⁴

Parameter	Frequency			
Sediment Mo	onitoring ³⁵			
opper				
Lead				
Zinc				
Cadmium				
PAHs, total ³⁶				
Chlordane ³⁷				
Dieldrin	Once every 2 years			
DDT, total ³⁸				
PCBs, total ³⁹				
Total Organic Carbon (TOC)				
Grain Size				
Sediment Toxicity				
Benthic Community				
Fish Tissue ⁴⁰				
Chlordane	Once every 2 years			
Dieldrin				
Toxaphene				
DDT				
PCBs ⁴¹				

³⁴ Sediment and fish tissue monitoring requirements pursuant to Attachment N, Part E of the LA County MS4 Permit.

³⁵ Pursuant to Attachment N, Part E.4.d.iv of the LA County MS4 Permit, samples shall be collected in accordance with SWAMP protocols and for analysis of general sediment quality constituents and the full chemical suite as specified in the State Water Board's Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (SQO).

³⁶ Total PAHs include but are not limited to: acenaphthene, anthracene, biphenyl, naphthalene, 2,6-dimethylnaphthalene, fluorene, 1-methylnaphthalene, 2-methylnaphthalene, 1-methylphenanthrene, phenanthrene, benzo(a)anthracene, benzo(a)pyrene, benzo(e)pyrene, chrysene, dibenz(a,h)anthracene, fluoranthene, perylene, and pyrene.

³⁷ Chlordane is defined as cis-Chlordane (alpha-Chlordane), trans-Chlordane (gamma-Chlordane), oxychlordane, cis-nonachlor, and trans-nonachlor.

³⁸ DDT is defined as the sum of 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT.

³⁹ High Resolution (EPA 1668); 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 SWAMP Quality Assurance Program Plan (page 72 of Appendix C).

⁽page 72 of Appendix C).

40 The target species in the Dominguez Channel Estuary shall be selected based on residency, local abundance and fish size at the time of field collection. Tissues analyzed shall be based on the most common preparation for the selected fish species. The City shall provide justification for its selection of the target fish species and method of tissue preparation when reporting the results of the tissue sampling.

⁴¹ Total PCBs are defined as the sum of Congeners.

Enclosure 2 - Map of Monitoring Locations

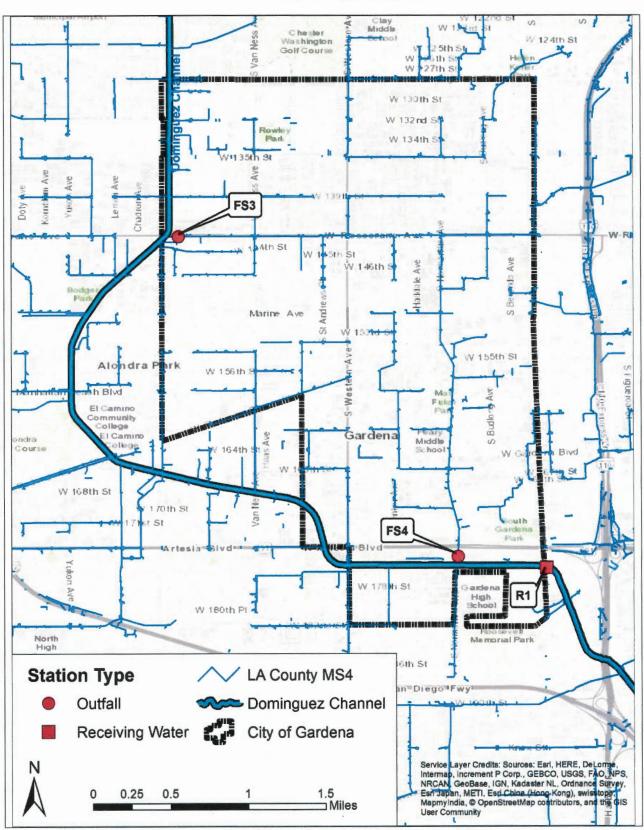


Figure 1. City of Gardena Monitoring Stations

Enclosure 3

Memorandum from Executive Officer to LA County MS4
Permittees Clarifying Aquatic Toxicity Monitoring Requirements





Los Angeles Regional Water Quality Control Board

TO:

Los Angeles County MS4 Permittees and City of Long Beach

FROM:

Samuel Unger, P.E. Surel Unger Executive Officer

DATE:

August 7, 2015

SUBJECT:

CLARIFICATION REGARDING FOLLOW-UP MONITORING REQUIREMENTS IN RESPONSE TO OBSERVED TOXICITY IN RECEIVING WATERS

TO THE MONITORING & REPORTING PROGRAM (ATTACHMENT E) OF THE LOS ANGELES COUNTY MS4 PERMIT (ORDER

NO. R4-2012-0175)

The Los Angeles County MS4 Permit, Attachment E requires chronic aquatic toxicity monitoring in receiving waters during both wet and dry weather conditions to determine whether designated beneficial uses are fully supported. Further, Attachment E requires additional monitoring at MS4 outfalls where aquatic toxicity is present above a certain effect level in downstream receiving waters to determine whether MS4 discharges are causing or contributing to the aquatic toxicity. In this situation, outfall monitoring must either entail monitoring for specific pollutants identified in a toxicity identification evaluation (TIE) in the downstream receiving water, or for aquatic toxicity itself, where the specific pollutants could not be identified through the TIE conducted on the downstream receiving water.

In its comments on the draft Integrated Monitoring Programs (IMPs) and Coordinated Integrated Monitoring Programs (CIMPs) submitted per the Los Angeles County MS4 Permit, the Los Angeles Water Board provided clarification and recommendations to Permittees regarding aquatic toxicity monitoring, particularly pertaining to the requirement to conduct chronic toxicity tests in dry and wet weather conditions and requirements for conducting a TIE and outfall monitoring. Subsequently, on December 9, 2014, Board staff met with several Permittees regarding its comments. During this meeting it was apparent that further clarification was necessary regarding requirements for follow-up monitoring when aquatic toxicity is present in downstream receiving waters. This memo provides additional clarification and applies to all IMPs and CIMPs developed pursuant to Part VI.B of the Los Angeles County MS4 Permit and Part VII.B of the City of Long Beach MS4 Permit.

It is acknowledged, however, that this memo may not address every situation that is encountered. We encourage the Permittees to approach toxicity testing and the TIE and TRE procedures thoughtfully and thoroughly in the interest of identifying and eliminating any source(s) of toxicity in MS4 discharges as expeditiously as possible and to consult with Los Angeles Water Board staff if you need assistance or clarification.

If you have any questions regarding these clarifications, please contact Renee Purdy at Renee.Purdy@waterboards.ca.gov or Shirley Birosik at Shirley.Birosik@waterboards.ca.gov.

The memo addresses requirements for follow-up monitoring in four receiving water scenarios where toxicity is present:

- Toxicity is present, but not above the TIE trigger as defined in Attachment E, Part XII.I.1¹;
- Toxicity is present above the TIE trigger and the TIE identifies the constituent(s) causing the toxicity;
- Toxicity is present above the TIE trigger during wet weather, but the TIE is inconclusive;
- Toxicity is present above the TIE trigger during dry weather, but the TIE is inconclusive.

The memo also addresses the several scenarios once outfall toxicity testing has been triggered. Attached to the memo are several simplified flowcharts to aid in understanding the process.

An inconclusive TIE is defined as a TIE for which the cause of toxicity cannot be attributed to a constituent or class of constituents (e.g., metals, insecticides, etc.) that can be targeted for monitoring even after conducting appropriate Phase I and Phase II TIE treatments. This outcome may result from either non-persistent toxicity such that the TIE treatments cannot be successfully completed on the toxic sample, or from the inability with available Phase I and Phase II TIE

An inconclusive TIE is one for which the cause of toxicity cannot be identified after the conclusion of TIE Phases I and II.

If a TIE is inconclusive: ✓ Check QA/QC ✓ Evaluate sensitive species selection ✓ Initiate future TIEs earlier (to) address non-persistent toxicity) Conduct all phases of TIE

treatments to isolate the constituent or class of constituents causing the toxicity. If the TIE is inconclusive due to non-persistent toxicity, the Los Angeles Water Board expects that Permittees will proactively identify and implement actions during the subsequent upstream and/or outfall toxicity sampling event to improve the likelihood of a conclusive TIE, while also following the steps below. Where a TIE is inconclusive due to the inability to determine the constituent(s) causing the toxicity, Permittees should evaluate further steps to improve the TIE outcome including sensitive species selection, QA/QC, and the need to conduct Phases I through III of a TIE, among others.

¹ Permit references correspond to the Los Angeles County MS4 Permit (Order No. R4-2012-0175)

TRIGGERS FOR ADDING TOXICITY MONITORING TO <u>UPSTREAM RECEIVING</u> WATER MONITORING / OUTFALL MONITORING:

- 1. If toxicity is present as determined based on a fail of the Test of Significant Toxicity (TST) ttest as specified in the Permit (Attachment E, Part XII.G.4) during wet or dry weather, but
 not above the TIE trigger (which is defined as when the survival or sublethal endpoint
 demonstrates a >=50 Percent Effect at the IWC as per Attachment E, Part XII.I.1), then:
 - a. Toxicity monitoring will be added to the next existing upstream receiving water site(s) during the same condition (wet or dry weather) for which toxicity was determined to be present. Monitoring for toxicity at the next existing upstream receiving water site(s) will occur during the next monitoring event that is at least 30 days following the original toxicity sample collection. Toxicity monitoring at individual receiving water sites will continue until (1) the deactivation criterion (i.e., two consecutive samples that pass the pass/fail TST t-test during the same condition) is met at the receiving water site or (2) a TIE is triggered and conclusively identifies the constituent or class of constituents causing toxicity, in which case the process outlined in Bullet 2 below is followed. OR
 - b. If there is no upstream receiving water monitoring site already established as part of the monitoring program, continue receiving water toxicity monitoring at the original site until (1) the deactivation criterion (i.e., two consecutive samples that pass the pass/fail TST t-test during the same condition) is met at the original receiving water site or (2) a TIE is triggered at the original site and conclusively identifies the constituent or class of constituents causing toxicity, in which case the process outlined in Bullet 2 below is followed. Also, conduct an evaluation similar to the TRE outlined in Attachment E, Part XII.J to identify, to the extent practicable, the source(s) of toxicity with the goal of identifying cause(s) of toxicity, paying particular attention to sources of potential constituent(s) causing toxicity (e.g., fipronil).
 - i. If there is no upstream receiving water monitoring site already established as part of the monitoring program and toxicity is present during <u>dry weather</u>, actions taken as part of the non-stormwater program (e.g., source identification and elimination or treatment of unauthorized non-stormwater discharges that are a source of pollutants) should be utilized to support the TRE.
 - ii. If there is no upstream receiving water monitoring site already established as part of the monitoring program and toxicity is present during wet weather, consider the following actions to support TRE: evaluating land uses and potential associated source(s) in the drainage area, evaluation of other permitted discharges, and evaluation of inspection activities. AND
 - c. If there is no upstream receiving monitoring site already established as part of the monitoring program and more than one occurrence of a fail of the TST t-test occurs at the original receiving water site within 3 years, then evaluate opportunities to conduct toxicity monitoring at upstream receiving water sites (either newly established or sites utilized by other monitoring programs), including tributaries.

- 2. If toxicity is present at a level exceeding the TIE trigger and the <u>TIE identifies the constituent</u> or class of constituents causing toxicity, then:
 - a. Do not add toxicity monitoring to upstream sites. AND
 - a. During the same condition, add the identified constituent or constituents within the class of constituents² to the monitoring site where toxicity was identified, the upstream receiving water site(s), and upstream outfall site(s) starting with the next monitoring event that is at least 45 days following the toxicity sample collection. Monitoring for the identified constituent(s) will continue until the deactivation criterion (i.e., two consecutive samples do not exceed Receiving Water Limitations (RWLs), Water Quality Based Effluent Limitations (WQBELs), or other appropriate threshold or guideline if there is no numeric RWL or WQBEL, for the identified constituents during the same condition) is met at the individual site. Where constituent(s) are identified in the outfall(s) above the RWL(s), WQBEL(s), or other appropriate threshold or guideline commence TRE at each corresponding outfall location per Attachment E, Part XII.J.
- 3. If toxicity is present at a level exceeding the TIE trigger during wet weather and the <u>TIE is</u> inconclusive, then:
 - a. Add toxicity monitoring to the next existing upstream receiving water site(s) during the next monitoring event that is at least 45 days following the original toxicity sample collection. Toxicity monitoring at individual receiving water site(s) will continue until (1) the deactivation criterion (i.e., two consecutive samples that pass the pass/fail TST t-test during the same condition) is met at the receiving water site or (2) a TIE is triggered and conclusively identifies the constituent or class of constituents causing toxicity, in which case the process outlined in Bullet 2 above is followed. AND
 - b. The second inconclusive TIE in 3 years during wet weather would trigger outfall toxicity testing at upstream outfall sites (i.e., (1) outfall sites located between the receiving water site and the nearest upstream receiving water site located on the same waterbody and (2) outfall sites located on tributaries that have a confluence with the waterbody where the confluence is located between the receiving water site and the nearest upstream receiving water site located on the same waterbody) following the process outlined below in "Steps Related Outfall Toxicity Testing" during the next monitoring event that is at least 45 days following the original toxicity sample collection. OR
 - c. As an alternative to the outfall monitoring described in Bullet 3.b., Permittees may propose an alternative approach any time after the first inconclusive TIE, which could include utilizing upstream receiving water sites (either newly established or sites utilized by other monitoring programs), including tributaries, additional outfall sites, and/or different outfall sites. However, the outfall monitoring approach described in Bullet 3.b. must be followed until Regional Water Board EO approval of the alternative approach.

² Using appropriate detection limits

- 4. If toxicity is present at a level exceeding the TIE trigger during <u>dry weather</u> and the <u>TIE is inconclusive</u>, then:
 - a. Add toxicity monitoring to the next existing upstream receiving water site(s) during the next monitoring event that is at least 45 days following the original toxicity sample collection. Toxicity monitoring at individual receiving water site(s) will continue until (1) the deactivation criterion (i.e., two consecutive samples that pass the pass/fail TST t-test during the same condition) is met at the receiving water site or (2) a TIE is triggered and conclusively identifies the constituent or class of constituents causing toxicity, in which case the process outlined in Bullet 2 above is followed during the next monitoring event that is at least 45 days following the original toxicity sample collection. AND
 - b. Add toxicity testing to upstream outfall sites (i.e., (1) outfall sites located between the receiving water site and the nearest upstream receiving water site located on the same waterbody and (2) outfall sites located on tributaries that have a confluence with the waterbody where the confluence is located between the receiving water site and the nearest upstream receiving water site located on the same waterbody) following the process outlined below in "Steps Related Outfall Toxicity Testing" during the next monitoring event that is at least 45 days following the original toxicity sample collection. OR
 - c. As an alternative to the outfall monitoring described in Bullet 4.b above, Permittees may propose an alternative approach any time after the first inconclusive TIE, which could include utilizing upstream receiving water sites (either newly established or sites utilized by other monitoring programs), including tributaries, additional outfall sites, and/or different outfall sites. However, the outfall monitoring approach described in Bullet 4.b above must be followed until Regional Water Board EO approval of the alternative approach.

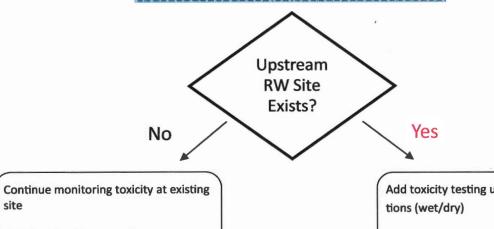
STEPS RELATED TO OUTFALL TOXICITY TESTING ONCE TRIGGERED:

- 1. If toxicity is not present as determined based on pass of the TST t-test as specified in the Permit, then continue toxicity testing during the same condition
- 2. (i.e. wet or dry weather) until (1) meeting the deactivation criterion (i.e., two consecutive samples that pass the pass/fail TST t-test during the same condition), or (2) a TIE conducted at the downstream receiving water site conclusively identifies the constituent or class of constituents causing toxicity, or (3) the discharge is eliminated.
- 3. If toxicity is present as determined based on fail of the TST t-test as specified in the Permit, but not above the TIE trigger, then continue toxicity testing during the same condition until (1) meeting the deactivation criterion (i.e., two consecutive samples that pass the pass/fail TST t-test during the same condition), or (2) a TIE conducted at a downstream receiving water site conclusively identifies the constituent or class of constituents causing toxicity, or (3) the discharge is eliminated. Concurrently conduct an evaluation similar to the TRE in Attachment E, Part XII.J to identify, to the extent practicable, the source(s) of toxicity with the goal of addressing cause(s) of toxicity, paying particular attention to sources of potential constituent(s) causing toxicity (e.g., fipronil).

- a. If toxicity is present in the non-stormwater discharge, actions taken as part of the non-stormwater program (e.g., source identification and elimination or treatment of unauthorized non-stormwater discharges that are a source of pollutants) should be utilized to support the TRE.
- b. If toxicity is present in the stormwater discharge, consider the following actions to support the TRE: evaluating land uses and potential associated source(s) in the drainage area, evaluation of other permitted discharges, and evaluation of inspection activities.
- 4. If toxicity is present at a level exceeding the TIE trigger and the <u>TIE identifies the</u> constituent or class of constituents causing toxicity, then:
 - a. Discontinue toxicity testing at the outfall. AND
 - b. Add the identified constituent or constituents within the identified class of constituents³ during the same condition starting with the next monitoring event that is at least 45 days following the toxicity sample collection and monitor for those constituents at the outfall until meeting the deactivation criterion for those constituents (i.e., two consecutive samples do not exceed RWLs, WQBELs, or other appropriate threshold or guideline if there is no numeric RWL or WQBEL, for identified constituents), while simultaneously performing a TRE for the constituent(s) causing toxicity per Attachment E, Part XII.J.
- 5. If toxicity is present at a level exceeding the TIE trigger and the <u>TIE is inconclusive</u>, then continue toxicity testing during the same condition until (1) meeting the deactivation criterion (i.e., two consecutive samples that pass the pass/fail TST t-test during the same condition), or (2) a TIE identifies the constituent or class of constituents causing toxicity (proceed with following the process outlined in Bullet 3, above), or (3) eliminate the discharge. Concurrently conduct an evaluation similar to the TRE in Attachment E, Part XII.J to identify, to the extent practicable, the source(s) of toxicity with the goal of addressing cause(s) of toxicity, paying particular attention to identifying sources of potential constituent(s) causing toxicity that may not have been evaluated in the TIE (e.g., fipronil).
 - a. If the TIE is inconclusive in the <u>non-stormwater discharge</u>, actions taken as part of the non-stormwater program (e.g., source identification and elimination or treatment of unauthorized non-stormwater discharges that are a source of pollutants) should be utilized to support the TRE.
 - b. If the TIE is inconclusive in the <u>stormwater discharge</u>, consider the following actions to support the TRE: evaluating land uses and potential associated source(s) in the drainage area, evaluation of other permitted discharges, and evaluation of inspection activities.

³ Using appropriate detection limits

Receiving Water Toxicity Present but Does NOT Exceed TIE Trigger

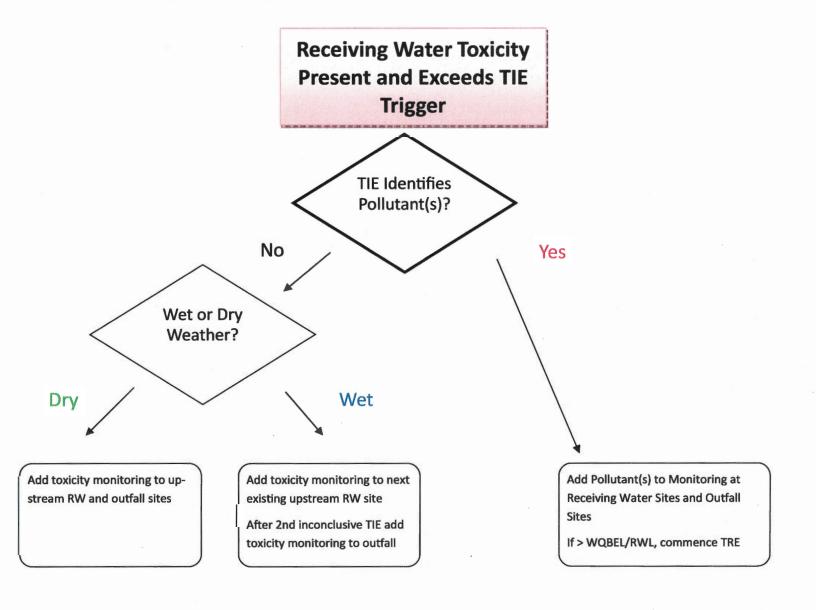


site

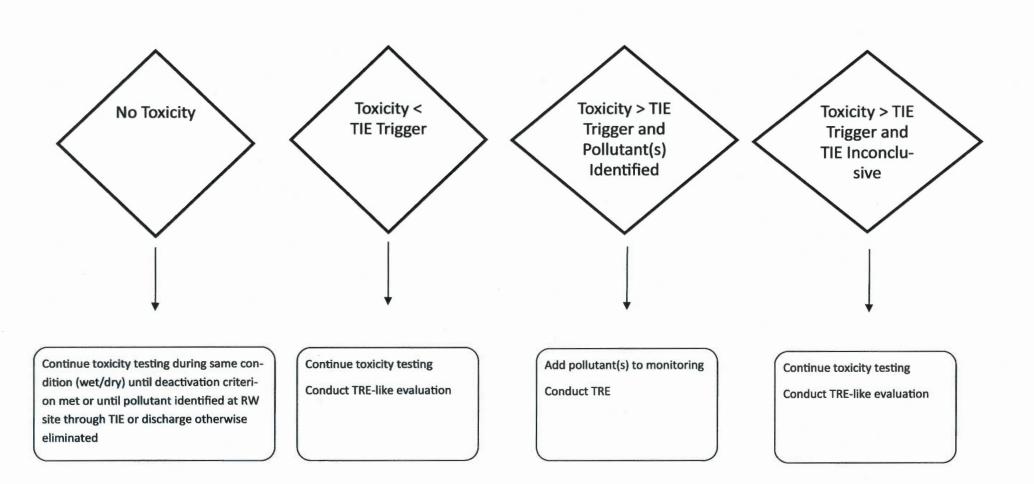
Conduct TRE-like evaluation

Evaluate potential for upstream monitoring

Add toxicity testing under same condi-



Outfall Toxicity Testing Once Triggered



Enclosure 4

Memorandum of Agreement for Cost Sharing for Implementation of Dominguez Channel CIMP

MEMORANDUM OF AGREEMENT BETWEEN THE SOUTH BAY CITIES COUNCIL OF GOVERNMENTS AND THE CITY OF GARDENA

FOR COST SHARING FOR THE IMPLEMENTATION OF THE COORDINATED INTEGRATED MONITORING PROGRAM (CIMP) FOR THE DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA

This Agreement is made and entered into as of December 18, 2018, by and between the South Bay Cities Council of Governments (SBCCOG), a California Joint Powers Authority, and the City of Gardena, a municipal corporation ("Permit Holder").

RECITALS

- For the purposes of this Agreement, the term "PERMITTEES" shall mean the Cities of Los Angeles, Carson, El Segundo, Hawthorne, Inglewood, Lawndale, Lomita, and the Los Angeles County Flood Control District (LACFCD) and the County of Los Angeles (County).
- 2. The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) have classified the Greater Los Angeles County Municipal Separate Storm Sewer System Permit (MS4) as a large MS4 pursuant to 40 CFR section 122.26(b)(4) and a major facility pursuant to 40 CFR section 122.2.
- The Regional Board adopted National Pollutant Discharge Elimination System MS4
 Permit Municipal Separate Storm Sewer System Permit Order No. R4-2012-0175
 (MS4 Permit).
- 4. The MS4 Permit became effective on December 28, 2012, and requires that the LACFCD, the COUNTY, and 84 of the 88 cities (excluding Avalon, Long Beach, Palmdale, and Lancaster) within the County comply with the prescribed elements of the MS4 Permit.
- 5. The MS4 Permit identified the PERMITTEES as MS4 PERMITTEES that are responsible for compliance with the MS4 Permit requirements pertaining to the PERMITTEES collective jurisdictional area in the Dominguez Channel Watershed Management Area.
- 6. The PERMITTEES elected voluntarily to collaborate on the development of a Coordinated Integrated Monitoring Program (CIMP) in accordance with the MS4 Permit for a portion of the Dominguez Channel Watershed Management Area as identified in Exhibit A of this Memorandum of Agreement (MOA) to comply with all applicable monitoring requirements of the MS4 Permit.
- 7. The United States Environmental Protection Agency established the Total Maximum Daily Loads ("TMDL") for Toxic Pollutants on March 23, 2012, with the intent of protecting and improving water quality in the Dominguez Channel and the Greater Los Angeles and Long Beach Harbor Waters ("Harbor Toxic Pollutants TMDL").

- 8. The Harbor Toxic Pollutants TMDL regulates certain discharges from National Pollutant Discharge Elimination System ("NPDES") permit holders, requiring organization and cooperation among the PERMITTEES.
- The PERMITTEES manage, drain or convey storm water into at least a portion of the Dominguez Channel, Greater Los Angeles and Long Beach Harbor Waters (including Consolidated Slip).
- 10. The PERMITTEES desire to facilitate the achievement of the objectives of the Harbor Toxic Pollutants TMDL by preparation and implementation of the CIMP
- 11. The PERMITTEES prepared the CIMP, and the SBCCOG has also retained the City of Los Angeles (CITY) to conduct the monitoring and reporting required by the CIMP.
- 12. For purposes of this Agreement the term "Consultant" shall refer to the CITY.
- 13. On December 11, 2015, Regional Board approved the CIMP.
- 14. The mission of the SBCCOG is to allow its members to act collaboratively and focus on improving the environment. As part of its mission and to help its members implement the CIMP for the Dominguez Channel Watershed Management Area, the SBCCOG entered into a MOA with the PERMITTEES to administer the monitoring contract with the CITY and invoice the PERMITEES for the monitoring services.
- 15. The City of Gardena is an Individual MS4 permit holder who is not a PERMITTEE but has indicated a desire to participate in the CIMP implementation for individual permit compliance.
- 16. The PERMITTEES authorized the SBCCOG to enter into individual separate MOAs with such individual MS4 permit holders (PERMIT HOLDER; who shall not have voting rights in any group relating to the PERMITTEES) for CIMP Implementation cost sharing purposes only.
- The Permit Holder desires to obtain monitoring data collected as part of the CIMP Implementation.
- 18. The role of the SBCCOG is to invoice and collect funds from the Permit Holder to cover its portion of the costs for CIMP Implementation.
- 19. The Permit Holder and the SBCCOG are collectively referred to as the "PARTIES."

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth herein, the PARTIES do hereby agree as follows:

- Section 1. Recitals. The recitals set forth above are fully incorporated as part of this Agreement.
- Section 2. <u>Purpose</u>. The purpose of this MOA is for the Permit Holder to cost share in the CIMP Implementation.

- Section 3. <u>Cooperation</u>. The PARTIES shall fully cooperate with one another to achieve the purposes of this MOA.
 - Section 4. <u>Voluntary Nature</u>. The PARTIES voluntarily enter into this MOA.
- Section 5. <u>Binding Effect</u>. This MOA shall become binding on SBCCOG and the Permit Holder.
- Section 6. <u>Term.</u> This MOA shall commence on September 1, 2018 and shall expire on February 28, 2019 unless terminated earlier pursuant to the provisions of Section 11 herein. The term of this Agreement may be extended by mutual agreement of the parties as may be necessary or desirable to carry out its purposes.

Section 7. Role of the SBCCOG.

- (a) The SBCCOG shall invoice and collect funds from the Permit Holder to cover a portion of the costs of hiring and paying the CITY to implement the CIMP.
- (b) The SBCCOG shall administer the CITY'S contract for implementation of the CIMP by contracting with and paying the CITY.

Section 8. Financial Terms.

- (a) The Permit Holder shall pay forty-four thousand (\$44,000) dollars to the SBCCOG in exchange for specific monitoring data from the CIMP Implementation as follows:
- i. Sediment chemistry, sediment toxicity, and benthic infauna data from the 2018 Regional Bight Program (station B18-10397 only)
- ii. Fish tissue bioaccumulation data from the Dominguez Channel Estuary (2018 only)
- (b) The SBCCOG will retain a fee of 10% (\$4,000) for their services. The remaining amount (\$40,000) will be credited towards the PERMITTEES cost of implementing the CIMP.
 - (c) The Permit Holder's payment is due upon execution of this MOA.
- (d) Upon receiving an invoice from the SBCCOG, the Permit Holder shall pay its invoice to the SBCCOG within thirty (30) days of the invoice's date.
- (e) The Permit Holder will be delinquent if its invoiced payment is not received by the SBCCOG within forty-five (45) days after the invoice's date. The SBCCOG will follow the procedure listed below: 1) verbally contact the representative of the Permit Holder; and 2) submit a formal letter from the SBCCOG Executive Officer to the Permit Holder at the address listed in Section 12 of the MOA. If payment is not received within sixty (60) days of the invoice date, the SBCCOG may terminate this MOA. However, no such termination may be ordered unless the SBCCOG first provides the Permit Holder with thirty (30) days written notice of its intent to terminate the MOA. The terminated Permit Holder shall remain obligated to SBCCOG for its delinquent payment and any other obligations incurred prior to the date of termination If the SBCCOG terminates this MOA due to the Permit

Holder being delinquent in its payment, Permit Holder shall no longer be entitled to the monitoring data collected as part of the CIMP.

(f) Any delinquent payment by the Permit Holder shall accrue compound interest at the average rate of interest paid by the Local Agency Investment Fund during the time that the payment is delinquent, provided that the interest shall not exceed any limit imposed by law.

Section 9. Independent Contractor.

- (a) The SBCCOG is, and shall at all times remain, a wholly independent contractor for performance of the obligations described in this MOA. The SBCCOG's officers, officials, employees and agents shall at all times during the term of this MOA be under the exclusive control of the SBCCOG. The Permit Holder cannot control the conduct of the SBCCOG or any of its officers, officials, employees or agents. The SBCCOG and its officers, officials, employees, and agents shall not be deemed to be employees of the Permit Holder.
- (b) The SBCCOG is solely responsible for the payment of salaries, wages, other compensation, employment taxes, workers' compensation, or similar taxes for its employees and Consultants performing services hereunder.

Section 10. Insurance.

(a) SBCCOG makes no guarantee or warranty that the reports prepared by SBCCOG, PERMITEES or its Consultant shall be approved by the relevant governmental authorities. SBCCOG shall have no liability to the Permit Holder for the negligent or intentional acts or omissions of Consultant. The Permit Holder's sole recourse for any negligent or intentional act or omission of the Consultant shall be against the Consultant and its insurance.

Section 11. <u>Termination</u>.

(a) Either party may terminate this Agreement without cause upon not less than thirty (30) days' written notice to the other party. The effective date of termination shall be upon the date specified on the notice of termination, or, in the event no date is specified, upon the thirtieth (30th) day following delivery of the notice.

Section 12. Miscellaneous.

- (a) Permit Holder has been accepted as a participant in the CIMP Implementation and shall not be entitled to appoint a representative or to vote or participate in any way in decisions assigned to PERMITTEES. Participant status entitles Permit Holder only to the monitoring data as specified in Sections 8ai-ii collected as part of the CIMP Implementation.
- (b) <u>Notices</u>. All Notices which the PARTIES require or desire to give hereunder shall be in writing and shall be deemed given when delivered personally or three (3) days after mailing by registered or certified mail (return receipt requested) to the following address or as such other addresses as the PARTIES may from time to time designate by written notice in the aforesaid manner:

To SBCCOG:

Jacki Bacharach SBCCOG Executive Officer 20285 S. Western Ave., #100 Torrance, CA 90501

To the Permit Holder:

Edward Medrano
City Manager
City of Gardena
1717 West 162nd Street
Gardena, CA 90247

- (c) <u>Amendment</u>. The terms and provisions of this MOA may not be amended, modified or waived, except by a written instrument signed by all PARTIES and approved by all PARTIES as substantially similar to this MOA.
- (d) <u>Waiver</u>. Waiver by either the SBCCOG or the Permit Holder of any term, condition, or covenant of this MOA shall not constitute a waiver of any other term, condition, or covenant. Waiver, by the SBCCOG or the Permit Holder, to any breach of the provisions of this MOA shall not constitute a waiver of any other provision or a waiver of any subsequent breach of any provision of this MOA.
- (e) <u>Law to Govern: Venue</u>. This MOA shall be interpreted, construed, and governed according to the laws of the State of California. In the event of litigation between the PARTIES, venue shall lie exclusively in the County of Los Angeles.
- (f) No Presumption in Drafting. The PARTIES to this MOA agree that the general rule than an MOA is to be interpreted against the PARTIES drafting it, or causing it to be prepared, shall not apply.
- (g) <u>Severability</u>. If any term, provision, condition or covenant of this MOA is declared or determined by any court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions of this MOA shall not be affected thereby and this MOA shall be read and construed without the invalid, void, or unenforceable provisions(s).
- (h) <u>Entire Agreement</u>. This MOA constitutes the entire agreement of the PARTIES with respect to the subject matter hereof and supersedes all prior or contemporaneous agreements, whether written or oral, with respect thereto.
- (i) <u>Counterparts</u>. This MOA may be executed in any number of counterparts, each of which shall be an original, but all of which taken together shall constitute but one and the same instrument, provided, however, that such counterparts shall have been delivered to all PARTIES to this MOA.
- (j) <u>Legal Representation</u>. All PARTIES have been represented by counsel in the preparation and negotiation of this MOA. Accordingly, this MOA shall be construed according to its fair language.

(k) <u>Authority to Execute this Agreement</u>. The person or persons executing this MOA on behalf of Permit Holder warrants and represents that he or she has the authority to execute this MOA on behalf of the Permit Holder and has the authority to bind Permit Holder.

IN WITNESS WHEREOF, the PARTIES hereto have caused this MOA to be executed on their behalf, respectively, as follows:

DATE: 1/11/18

SOUTH BAY CITIES COUNCIL OF GOVERNMENTS

Britt Huff

SBCCOG Chair

DATE: 12/19/18

PERMIT HOLDER
City of Gardena

Edward Medrano City Manager

Approved as to Form:

Peter L. Wallin City Attorney

EXHIBIT A

Dominguez Channel Enhanced Watershed Management Area Group

