



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

December 21, 2015

Ms. Elaine Jeng, City Engineer
City of El Monte
Department of Public Works
11333 Valley Blvd
El Monte, CA 91731

APPROVAL, WITH CONDITIONS, OF THE CITY OF EL MONTE'S INTEGRATED MONITORING PROGRAM, PURSUANT TO ATTACHMENT E, PART IV.A OF THE LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT (NPDES PERMIT NO. CAS004001; ORDER NO. R4-2012-0175)

Dear Ms. Jeng:

The Los Angeles Regional Water Quality Control Board (Los Angeles Water Board or Board) has reviewed the revised monitoring program submitted on March 9, 2015 by the City of El Monte (City). 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 an integrated monitoring program (IMP) 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 Los Angeles Water Board.

The Los Angeles Water Board has reviewed the City's revised IMP and has determined that the IMP 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.

Public Review and Comment

On July 3, 2014, the Board provided public notice and a 46-day period to allow for public review and comment on the City's draft IMP. A separate notice of availability regarding the draft monitoring programs, including the City's IMP, was directed to State Senators and Assembly Members within the Coastal Watersheds of Los Angeles County. During the review of the draft and revised IMP, the Los Angeles Water Board considered any comments applicable to the City's proposed IMP.

Los Angeles Water Board Review

Concurrent with the public review, the Los Angeles Water Board, along with U.S. EPA Region IX staff, reviewed the draft monitoring programs. On December 22, 2014, the Los Angeles Water Board sent a letter to the City detailing the Board's comments on the draft IMP and identifying the revisions that needed to be addressed prior to the Board's approval of the City's IMP. The letter directed the City to submit a revised IMP addressing the Los Angeles Water Board's comments. The City submitted its revised IMP on March 22, 2015 for Los Angeles Water Board review and approval.

In separate correspondence dated August 7, 2015 to all Permittees developing IMPs and Coordinated Integrated Monitoring Programs (CIMPs), the Los Angeles Water Board provided clarification of requirements for toxicity monitoring – specifically regarding additional toxicity monitoring upstream and at outfalls where toxicity is identified during a sampling event at a receiving water monitoring site.

IMP Approval

The Los Angeles Water Board hereby approves, subject to the following conditions, the City's March 22, 2015 revised IMP (the version with markups). The Board may rescind this approval if all of the following conditions are not met to the satisfaction of the Board within the timeframe provided below.

1. Provide copies of formal agreements with the Lower Los Angeles River Watershed Committee and the Lower San Gabriel River Watershed Committee regarding collaboration on the Dominguez Channel/Greater Harbors Toxics TMDL Monitoring Program, as an attachment to the Final IMP.
2. Specify in the Final IMP which month is the "historically driest month" in regards to dry weather monitoring.

The City shall submit a final IMP to the Los Angeles Water Board that satisfies all of the above conditions no later than **January 20, 2016**. Pursuant to Attachment E, Part IV.C.6 of the LA County MS4 Permit, the City must commence implementing its monitoring program within 30 days after this approval of the IMP (i.e. no later than January 20, 2016). Please note that the City is responsible for complying with all reporting provisions included in Attachment E, Part XIV – XVIII and Sections D and E of Part XIX, "Reporting Requirements for Los Angeles River WMA TMDLs" and "Reporting Requirements for San Gabriel River WMA TMDLs," respectively, and Attachment D, Sections IV, V, and VII.A of the LA County MS4 Permit. The Group is also responsible for complying with applicable reporting provisions included in Section C of Part XIX, "Reporting Requirements for Dominguez Channel and Greater Harbors Waters WMA TMDLs." Finally, the City is also responsible for complying with the following requirements under Annual Reporting and Adaptive Management.

Annual Reporting

Within the reporting year, through its Annual Report per Attachment E, Part XVIII of the LA County MS4 Permit, the City 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-storm water outfall monitoring data

against all applicable receiving water limitations, water quality-based effluent limitations, non-storm water action levels, and aquatic toxicity thresholds as defined in Sections XII.F and G of this MRP. All sample results that exceeded one or more applicable thresholds shall be readily identified. Additionally, the annual report must include the analytical methods used for all analyses.

The Annual Report shall also include a Municipal Action Level (MAL) Assessment Report, which shall present the stormwater outfall monitoring data in comparison to the applicable MALs, and identify those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs in discharges of stormwater from the MS4. Please note that beginning in Year 3 after the effective date of the LA County MS4 Permit, each Permittee or group of Permittees shall submit a MAL Action Plan with the Annual Report to the Regional Water Board Executive Officer, for those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs in any discharge of storm water from the MS4. Please note that implementation of an approved Watershed Management Program (WMP) or Enhanced Watershed Management Program (EWMP) per Part VI.C of the LA County MS4 Permit fulfills all requirements related to the development and implementation of the MAL Action Plan, as per Attachment H of the LA County MS4 Permit, for those pollutants addressed by the WMP or EWMP.

Adaptive Management

The Regional Water Board or its Executive Officer, consistent with 40 CFR section 122.41, may approve changes to the Monitoring and Reporting Program, after providing the opportunity for public comment, either:

1. By request of the City or by an interested person after submittal of the Monitoring Report. Such request shall be in writing and filed not later than 60 days after the Monitoring Report submittal date, or
2. As deemed necessary by the Regional Water Board Executive Officer, following notice to the City.

As part of the adaptive management provisions, any modifications to the IMP must be submitted to the Los Angeles Water Board for review and approval. The City must implement any modifications to the IMP upon approval by the Los Angeles Water Board or its Executive Officer, or within 60 days of submittal of modifications if the Los Angeles Water Board or its Executive Officer expresses no objections. Note that the City's Report of Waste Discharge (ROWD) is due no later than July 1, 2017. To align any modifications to the IMP proposed through the adaptive

management provisions with permit reissuance, results of the first adaptive management cycle should be submitted in conjunction with the City's ROWD.

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 or by phone at (213) 620-2150.

Sincerely,



Samuel Unger, P.E.
Executive Officer

cc: Edmond Suher, CASC Engineering & Consulting

Attachment: August 7, 2015 Memorandum on 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)

Los Angeles Regional Water Quality Control Board

TO: Los Angeles County MS4 Permittees and City of Long Beach

FROM: Samuel Unger, P.E.
Executive Officer *Samuel Unger*

DATE: August 7, 2015

SUBJECT: 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)

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; and
- 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

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

the inability with available Phase I and Phase II 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.

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

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

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

1. If toxicity is present as determined based on a fail of the Test of Significant Toxicity (TST) t-test 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 dry weather, 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 TIE identifies the constituent 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 TIE is 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 dry weather and the TIE is 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 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.

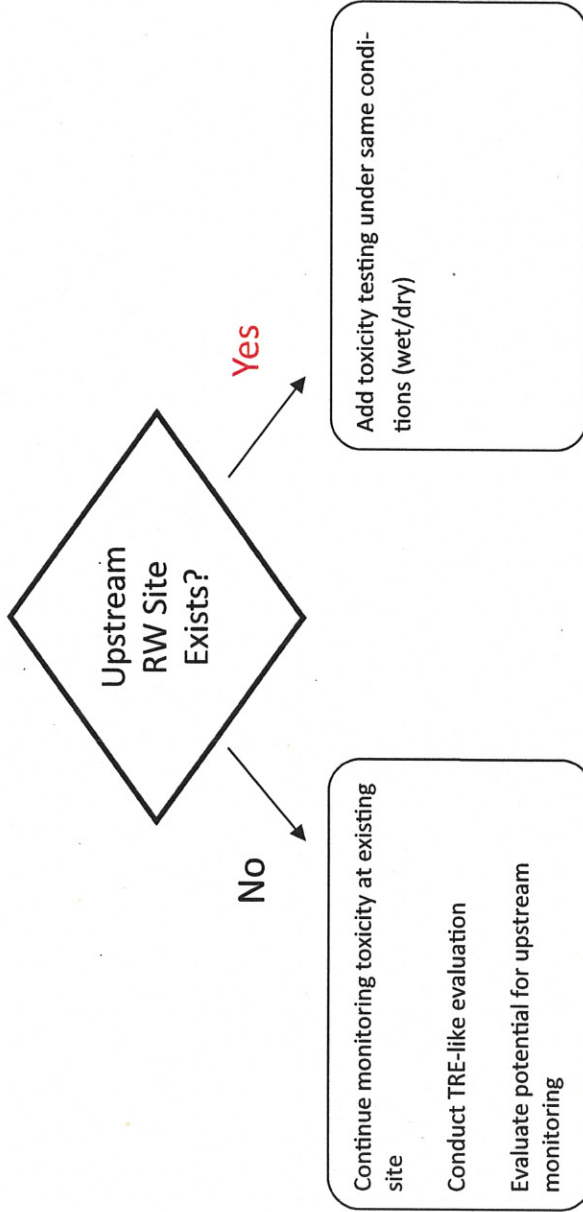
STEPS RELATED TO OUTFALL TOXICITY TESTING ONCE TRIGGERED:

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).

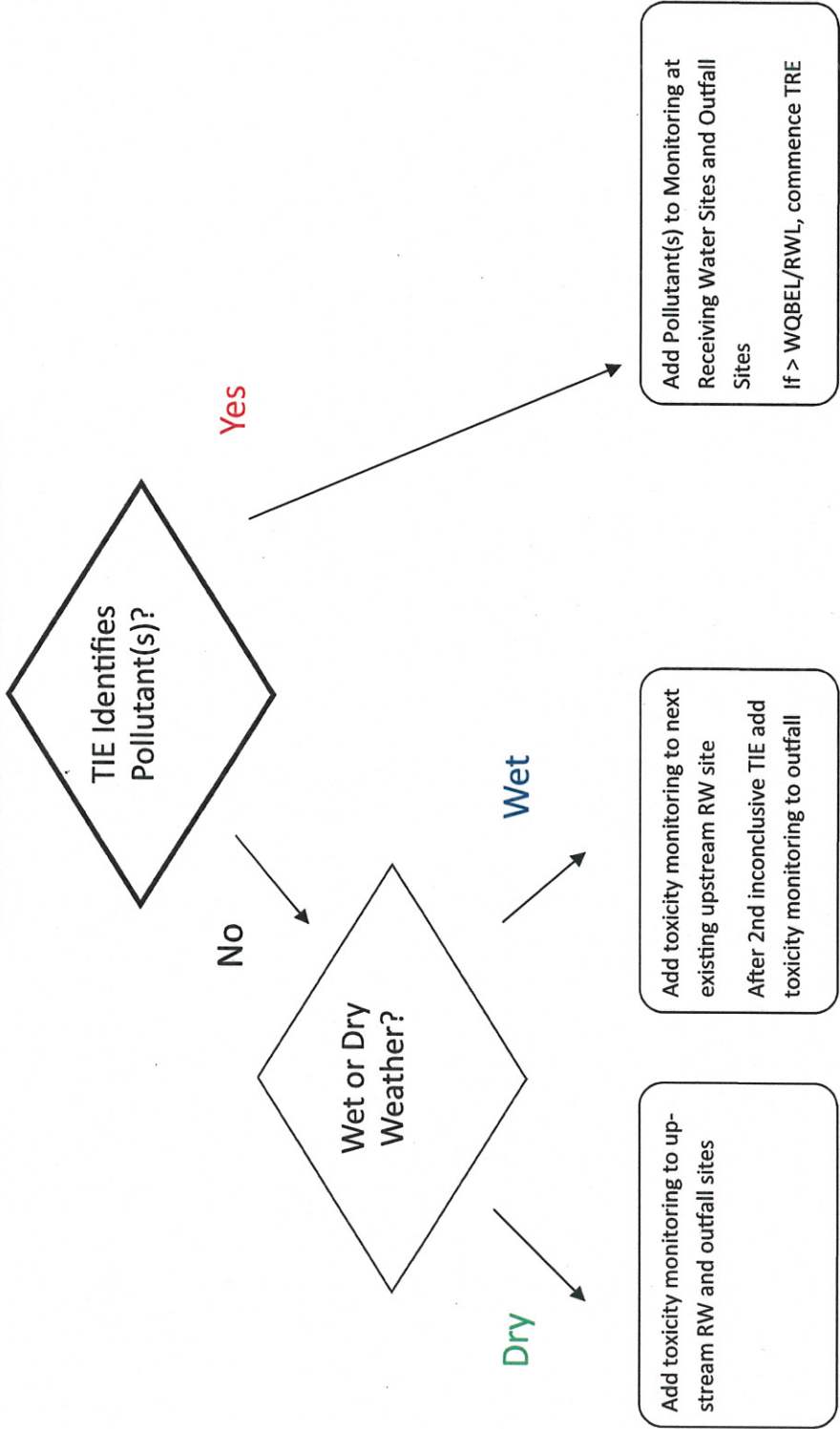
- a. If toxicity is present in the non-stormwater discharge, actions taken as part of the non-stormwater program (e.g., source identification and elimination or treatment of unauthorized non-stormwater discharges that are a source of pollutants) should be utilized to support the TRE.
 - b. If toxicity 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 TIE identifies the 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 TIE is inconclusive, 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 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 the TIE is inconclusive 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.

³ Using appropriate detection limits

**Receiving Water Toxicity
Present but Does NOT Exceed
TIE Trigger**



Receiving Water Toxicity Present and Exceeds TIE Trigger



Outfall Toxicity Testing
Once Triggered

