UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Certified Mail No. 7003 2260 0000 8859 4125
Return Receipt Requested

September 4, 2014

Samuel Unger, Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Re: Formal objection letter for pre-notice draft NPDES permits for the Joint Outfall System's Whittier Narrows Water Reclamation Plant (NPDES No. CA0053716) and Pomona Water Reclamation Plant (NPDES No. CA0053619)

Dear Mr. Unger:

Through this letter, the U.S. Environmental Protection Agency, Region 9 (EPA) formally objects to the pre-notice draft NPDES permits for discharges from the Whittier Narrows and Pomona water reclamation plants, based on Clean Water Act (CWA) section 402(d)(2) and 40 CFR 123.44, and the 1989 NPDES Memorandum of Agreement (MOA). EPA issued an initial objection to these pre-notice draft permits on July 31, 2014. As you know, in conformance with our 1989 NPDES MOA, EPA's initial objection has delayed the permits' public notice pending action under MOA section II.C.4. Accordingly, EPA is expediting issuance of the formal objection letter to avoid undue delay of the permits' final issuance. This formal objection letter describes the changes to the permits that are required as a condition to eliminate EPA's formal objection, based on 40 CFR 123.44(c)(4), (5), and (8). These necessary changes relate to numeric effluent limitations for whole effluent toxicity (WET) and are included as Attachment 1 (Whittier Narrows Water Reclamation Plant) and Attachment 2 (Pomona Water Reclamation Plant) of this letter.

As stated previously, based on WET data provided by your staff, EPA concurs that discharges from both plants exhibit the reasonable potential to exceed the narrative water quality standard for chronic toxicity in the Los Angeles Region Basin Plan and that water quality based effluent limits (WQBELs) are required under 40 CFR 122.44(d)(1)(i) and (v). The permits, however, do not meet the CWA statutory and regulatory requirements because the proposed chronic toxicity effluent "limit" in the pre-notice draft permits is a "trigger" for further investigation, rather than an actual WQBEL. This concern needs to be addressed to ensure these permits include effluent limitations as stringent as necessary to meet water quality standards and comply with NPDES requirements. Moreover, while the permits include clear, correctly expressed numeric effluent limits for chemical-specific pollutants necessary to meet CWA

requirements for NPDES effluent limits, the permits do not have numeric WQBELs for WET, nor is there an explanation as to why these would be infeasible to calculate. We are concerned that WET is treated differently than chemical-specific pollutants in a way that is inconsistent with NPDES regulations, and that a corresponding lack of transparency, clarity, and enforceability for chronic toxicity WQBELs results from this difference in approach. These concerns have been identified and expressed to the State and Regional Water Boards in EPA's 2014 draft and 2008 NPDES permit quality review reports.

A. Permits must include WQBELs for chronic toxicity: "triggers" for further investigation are not WQBELs.

In 1989, EPA promulgated regulations at 40 CFR 122.44(d)(1) implementing CWA section 301(b)(1)(C) to administer the development and implementation of WQBELs for both narrative and numeric water quality criteria. Under the regulations, WQBELs must control all pollutants, including WET, that will be discharged at a level that causes, has the reasonable potential to cause, or contributes to an exceedance above any State water quality standard. 40 CFR 122.44(d)(1)(i). CWA section 502(11) defines "effluent limitation" as "any restriction established by the State or Administrator on quantities, rates, and concentrations of chemical, physical, biological, or other constituents which are discharged from point sources into navigable waters." NPDES permits must contain "effluent limitations" for WET where reasonable potential has been demonstrated for excursion above a narrative criterion. 40 CFR 122.44(d)(1)(v).

The Whittier Narrows and Pomona permits express a chronic toxicity requirement as a series of steps which include a narrative trigger for further investigation of effluent toxicity, not as an effluent limitation for WET. The "There shall be no chronic toxicity in the effluent discharge" language is imbedded in a section of the permit that discusses multiple triggers and subsequent monitoring and investigation of the effluent. The series of triggers and resulting investigations are comprised of accelerated toxicity testing following a median monthly effluent trigger of "Fail," and a toxicity identification evaluation following a single sample trigger of "Fail" in two of six accelerated toxicity tests. Taken together, these toxicity triggers simply require further investigation, and thus do not meet the definition of "effluent limitation" under the CWA, as they do not restrict the "quantity, rate, or concentration" of pollutants in the effluent. CWA section 502(11). Therefore, these permit conditions require only further toxicity testing and investigation and are not sufficient to meet the regulatory requirement that permits contain "effluent limitations" for WET where reasonable potential has been demonstrated for an exceedance above a narrative criterion. 40 CFR 122.44(d)(1)(v). The relevant provisions of the permits are:

Whittier Narrows permit section IV.C.f.

f. Chronic Toxicity Trigger and Requirements:

The chronic toxicity of the effluent shall be expressed and reported as "Pass" or "Fail" as Median Monthly Effluent Trigger (MMET). The MMET for chronic toxicity shall only apply when there is a discharge

more than one day in a calendar month period. During such calendar months, exactly three independent toxicity tests are required when one toxicity test results in "Fail."

i. There shall be no chronic toxicity in the effluent discharge.

ii. If the chronic toxicity of the effluent yields a "Fail" result as the MMET then the Permittee shall immediately implement accelerated chronic toxicity testing according to Attachment E - MRP, Section V.A.7. If any two out of the initial test and the six accelerated tests results yields a "Fail", then the Permittee shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in Attachment E – MRP, Section V.A.

iii. The Permittee shall conduct chronic toxicity monitoring as specified in Attachment E – MRP.

Pomona permit section IV.A.3.g.

g. Toxicity Trigger and Requirements:

i. The chronic toxicity of the effluent shall be expressed and reported as "Pass" or "Fail," as a Median Monthly Effluent Trigger (MMET). The MMET for chronic toxicity shall only apply when there is a discharge more than one day in a calendar month period. During such calendar months, exactly three independent toxicity tests are required when one toxicity test results in "Fail".

ii. There shall be no chronic toxicity in the effluent discharge.

iii. If the chronic toxicity of the effluent yields a "FAIL" result as the MMET, then the Discharger shall immediately implement accelerated chronic toxicity testing according to Attachment E – MRP, Section V.B.3. If any two of the six accelerated test results yields a "FAIL," then the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in Attachment E – MRP, Sections V.D and V.E.

iv. The Discharger shall conduct chronic toxicity monitoring as specified in Attachment E – MRP.

To meet the requirements of the CWA and supporting regulations, specifically CWA sections 301(b)(1)(C) and 502(11) and 40 CFR 122.44(d)(1)(i) and (v), these provisions must be changed to clearly require actual effluent limits on chronic WET where there is a demonstration of reasonable potential. Furthermore, to clarify permit compliance requirements, the permits should be revised to define chronic toxicity and specify compliance determination provisions for

the required chronic WET WQBEL (in Order section VII), in a manner that directly links the expression of the required chronic WET WQBEL (40 CFR 122.44(d)(1)) to the required effluent monitoring results to be reported for chronic toxicity (40 CFR 122.48). Necessary and recommended changes for the permits are specifically described in Attachments 1 and 2 of this letter.

B. WQBELs must be as stringent as necessary to meet water quality standards, including numeric WQBELs as needed.

Even if the requirements related to the aim of "no chronic toxicity" in the effluent were expressed as a valid narrative WQBEL for WET, the Los Angeles Regional Water Quality Control Board (L.A. Regional Water Board) has failed to justify how such a narrative requirement would achieve water quality standards, as would be the case with a numeric limit. The L.A. Regional Water Board, like other Regional Water Boards in California, may be following State Water Resources Control Board (State Water Board) Water Quality Order (WQO) 2003-0012 (and other related precedential WQOs) for the expression of chronic toxicity WQBELs for non-ocean publicly owned treatment works (POTW) permits, which does not provide for the use of numeric effluent limits for chronic toxicity, nor for the chemical(s) causing toxicity. As we have previously discussed with the State Water Board, WQO 2003-0012 misapplies 40 CFR 122.44(k)(3)—which provides that effluent limits may be other than numeric—because the WQO ignores the need to show the infeasibility of calculating numeric WQBELs in order to justify a non-numeric effluent limit. Moreover, to comply with the CWA, the L.A. Regional Water Board must ensure that the WQBEL for chronic WET will be as stringent as necessary to meet water quality standards. CWA section 301(b)(1)(C) and 40 CFR 122.44(d)(1). Thus, even if the L.A. Regional Water Board were to make clear the requirement that "There shall be no chronic toxicity in the effluent discharge" is an independently enforceable chronic WET WQBEL, it must demonstrate why such a narrative limit will control the discharge as stringently as necessary to meet water quality standards and why a numeric WQBEL is not feasible.

Furthermore, WET tests measure the biological responses of test organisms in an effluent relative to test organisms in a negative control. The responses are quantified in biological terms (e.g., mean proportion of surviving organisms, mean dry weight of surviving organisms). Different options for formal statistical analyses then follow for reporting WET test results required under NPDES permits (i.e., hypothesis testing approaches, point estimation techniques). Consequently, permit writers setting NPDES effluent limits for WET need to connect the expression of the required WQBEL with the expressions of both the applicable water quality standard and the monitored and reported WET test results, as explained in the examples below.

California's chronic toxicity water quality objective in ocean waters is established as 1 chronic toxic unit. 2012 California Ocean Plan, page 7. Likewise, for non-ocean waters regulated by the Basin Plan (e.g., as described in technical documents for chronic toxicity total maximum daily loads in the Calleguas Creek watershed and waters of Dominguez Channel and Los Angeles/Long Beach Harbors), the L.A. Regional Water Board has established water toxicity targets of 1 chronic toxic unit to meet the Basin Plan's narrative toxicity objective and protect

aquatic life beneficial uses when toxicity of unknown causes may occur. The objective and these targets are used to set WQBELs for chronic WET that are numeric. Their use is a valid and reasonable approach to implement water quality standards that are either numeric or narrative. For the Whittier Narrows and Pomona permits, the L.A. Regional Water Board has not provided any explanation as to why it would be infeasible to calculate numeric WET limits for chronic toxicity. By contrast, on May 8, 2014, the L.A. Board adopted and issued permits for three POTWs in the Calleguas Creek watershed that contain numeric chronic toxicity WQBELs. Additionally, toxicity WQBELs in NPDES permits for POTWs issued in California which are not governed by WQO 2003-0012 are expressed numerically. Similarly, current Arizona POTW permits illustrate the feasibility of requiring numeric chronic WET WQBELs. The Arizona Department of Environmental Quality routinely calculates and incorporates a median monthly effluent limit of 1 chronic toxic unit and a maximum daily effluent limit of 1.6 chronic toxic units into POTW permits with no authorized mixing zone or dilution allowance.

Moreover, it is important to note that the Whittier Narrows and Pomona discharges have no authorized mixing zone or dilution allowance for pollutants, including WET, because they are to receiving waters which often do not have the safety factor of diluting ambient upstream flows that can decrease the effect of toxic discharges. Under such discharge and receiving water conditions, the use of numeric WQBELs provides a clear and enforceable means to protect water quality.

For toxicity (and other pollutant parameters toxic to aquatic life), numeric average (or median) monthly and maximum daily WQBELs will: (1) numerically restrict the highly toxic daily discharges that are of significant concern for protection of water quality standards when they occur; (2) ensure longer term compliance with toxicity water quality standards; and (3) clarify permit compliance requirements for everyone. Accordingly, absent a demonstration that numeric WQBELs are infeasible to calculate, the narrative WQBELs in these permits are inconsistent with the regulatory requirements at 40 CFR 122.44(k)(3).

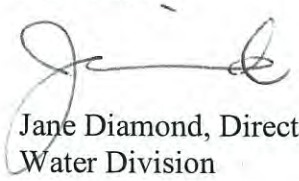
C. <u>POTW effluent limits for toxicity must meet 40 CFR 122.45(d) and act as WET WQBELs that meet water quality standards for aquatic life protection under 40 CFR 122.44(d)(1)(i).</u>

EPA agrees with the permits' fact sheets determination under 40 CFR 122.45(d) that a maximum daily WQBEL is necessary to protect against highly toxic short-term peaks of acute or chronic toxicity and meet water quality standards. We note, however, that despite this determination, the permits do not include the necessary daily and monthly WQBELs for chronic WET. This is not only internally illogical, but also environmentally significant. Without WQBELs expressed as daily and monthly limits, these permits do not meet 40 CFR 122.45(d) and 40 CFR 122.44(d)(i). The L.A. Regional Water Board can address this concern by following the approach used in the three POTW permits adopted on May 8, 2014 referenced above, and in permits not governed by WQO 2003-0012 that incorporate quantitative/numeric daily and monthly WQBELs for chronic toxicity (and toxic chemicals).

EPA requests that the L.A. Regional Water Board redraft the permits to address this formal objection, as described above and in Attachments 1 and 2. The revised permits must be submitted to EPA for review within 90 days of receipt of this letter, in accordance with MOA section II.C.4 and 40 CFR 123.44. If the L.A. Regional Water Board does not resubmit revised permits that address EPA's objection within 90 days of receipt of this letter, EPA shall acquire exclusive NPDES authority over the discharges pursuant to 40 CFR 123.44(h)(3), as described under the MOA. The L.A. Regional Water Board may request a hearing on EPA's objection pursuant to MOA section II.C.4.d.2 and 40 CFR 123.44(c).

If you have questions regarding our formal objection to the subject pre-notice draft permits, please call me, John Kemmerer at (213) 244-1832, David Smith at (415) 972-3464, or Robyn Stuber at (415) 972-3524. We look forward to the expeditious resolution of our concerns regarding these permits.

Sincerely,



Jane Diamond, Director
Water Division

cc: Tom Howard, Executive Officer—California State Water Resources Control Board

Grace Robinson Hyde, Chief Engineer and General Manager—County Sanitation Districts of Los Angeles County

Attachment 1

Whittier Narrows Water Reclamation Plant
NPDES No. CA0053716

A. Required Changes.

Based on applicable CWA statutory and regulatory requirements for NPDES effluent limits and relevant information provided in the pre-notice draft permit's fact sheet, the effluent limitations sections of the permit (see Order section IV.A.1.a, Table 4; and Order section IV.B.1.a, Table 5) must be revised to clearly require actual WQBELs for chronic WET which are numeric and incorporate both a daily and monthly expression. The WQBELs must be expressed in a manner that is clearly enforceable and specifically describes testing, analysis, and reporting procedures with which permit compliance will be evaluated. 40 CFR 122.48.

B. Recommended Changes.

Numeric WQBELs for chronic WET in these permits should be accompanied by clear, detailed descriptions of how WET tests are to be conducted and evaluated for compliance evaluation purposes. One possible approach, consistent with the conventions used by the L.A. Regional Water Board, are the recommend following changes to clarify the expression of effluent limitations and the reporting of compliance monitoring results for chronic WET:

1. The conventions used by the L.A. Regional Water Board to translate the Basin Plan's narrative toxicity objective into WET WQBELs for continuous discharges rely on a chronic toxicity MDEL and MMEL, expressed in units of the Test of Significant Toxicity (TST) hypothesis testing approach ("Pass" or "Fail" and "Percent Effect") (see table below). Based on these conventions, which include the L.A. Regional Water Board's chosen statistical approach for interpreting toxicity, the following WQBELs and implementation language are recommended for the permit (see Order section IV.A.1.a, Table 4; and Order section IV.B.1.a, Table 5):

Parameter	Units	Median Monthly Effluent Limitation	Maximum Daily Effluent Limitation
Chronic Toxicity[1]	Pass or Fail, % Effect (Test of Significant Toxicity)	Pass	Pass or % Effect < 50

[1] The median monthly effluent limitation (MMEL) shall be reported as "Pass" or "Fail". The maximum daily effluent limitation (MDEL) shall be reported as "Pass" or "Fail" and "% Effect". The MMEL for chronic toxicity shall only apply when there is a discharge more than one day in a calendar month period. During such calendar months, exactly three independent toxicity tests are required when one toxicity test results in "Fail".

2. Similarly, based on the L.A. Regional Water Board's chosen statistical approach for interpreting toxicity and limiting WET, the following additions (italicized language) to the permit's chronic toxicity compliance determination provision (Order section VII.I) are recommended:

The Maximum Daily Effluent Limitation (MDEL) for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST approach, results in "Fail" and the "Percent Effect" is ≥0.50.

"*MMET*" should be corrected to "*MMEL*".

Also, if the TST approach is used, using a 2-concentration test design for data analysis, we recommend the addition of new language to this section of the permit to clarify the transparent reporting of WET test monitoring results. The following italicized language would be appropriate to ensure that valid WET test monitoring results are not improperly reported, or otherwise rendered invalid for NPDES compliance reporting, by the Permittee:

The chronic toxicity MDEL and MMEL are set at the IWC for the discharge (100% effluent) and expressed in units of the TST approach ("Pass" or "Fail", "Percent Effect"). All NPDES effluent compliance monitoring for the chronic toxicity MDEL and MMEL shall be reported using only the 100% effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (Ho) (see above) is not tested using a multi-concentration test design; therefore, the concentration-response relationship for the effluent and/or PMSDs are not reviewed or used to interpret the TST result reported as the effluent compliance monitoring result.

3. Under Order section VII, we recommend adding the following revision related to compliance determination for the required median monthly WQBEL for chronic WET. This language is in existing L.A. Regional Water Board NPDES permit requirements for chronic toxicity compliance determination:

Median Monthly Effluent Limitation (MMEL)

If the median of daily discharges over a calendar month exceeds the MMEL for a given parameter, an alleged violation will be flagged and the Permittee will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). However, an alleged violation of the MMEL will be considered one violation for the purpose of assessing State mandatory minimum penalties. If no sample (daily discharge) is taken over a calendar month, no compliance determination can be made for that month with respect to effluent violation determination, but compliance determination can be made for that month with respect to reporting violation determination.

4. Based on the L.A. Regional Water Board's chosen statistical approach for interpreting toxicity and limiting WET, addition of the following italicized effluent monitoring

language is recommended for addition to Monitoring and Reporting Program section IV.A.1, Table E-3:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chronic Toxicity	Pass or Fail, *% Effect (Test of Significant Toxicity)*	24-hour composite	Monthly[1]	1
[1] The Permittee shall conduct whole effluent toxicity monitoring as outlined in section V. Please refer to section V.A.7 for the accelerated monitoring schedule. The median monthly summary result shall be reported as "Pass" or "Fail". The maximum daily single result shall be reported as "Pass" or "Fail" and "% Effect". When there is a discharge more than one day in a calendar month period, exactly three independent toxicity tests are required when one toxicity test results in "Fail".				

5. Similarly, under Monitoring and Reporting Program section V.A.5.b, the following correction (italicized language) related to the chronic toxicity MMEL is recommended:

"*Median Monthly Effluent Trigger (MMET)*" should be corrected to "*Median Monthly Effluent Limit (MMEL)*".

6. Under Monitoring and Reporting Program section V.A.5.c, we are recommending the addition of new language (italicized) for chronic toxicity monitoring to help explain reporting of WET test compliance monitoring results. This language clarifies that the only test acceptability criteria (TAC) used to invalidate a WET test result are the TAC in EPA's WET test methods:

If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method *(see Table x, below)*, then the Permittee must re-sample and re-test within 14 days.

Table x. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (U.S. EPA 2002, EPA-821-R-02-013).	
U.S. EPA Test Method Number	*Test Acceptability Criteria (TAC)*
Fathead Minnow, Pimephales promelas, Larval Survival and Growth Test Method 1000.0 (Table 1).	*80% or greater survival in controls; average dry weight per surviving organism in control chambers equals or exceeds 0.25 mg. (required)*
Daphnid, Ceriodaphnia dubia, Survival and Reproduction Test Method 1002.0 (Table 3).	*80% or greater survival of all control organisms and an average of 15 or more young per surviving female in the control solutions. 60% of surviving control females must produce three broods. (required)*

Green Alga, Selenastrum capricornutum, Growth Toxicity Test Method 1003.0 (Table 3).	*Mean cell density of at least 1 X 10^6 cells/mL in the controls; and variability (CV%) among control replicates less than or equal to 20%. (required)*

7. To explain proper reporting for reference toxicant test results, we recommend adding the italicized language to the second sentence of Monitoring and Reporting Program section V.A.5.e:

   All reference toxicant test results should be reviewed and reported *using the EC25.*

8. To explain proper reporting of effluent toxicity tests conducted during periods of species sensitivity screening, we recommend that Monitoring and Reporting Program section V.A.4 be revised to include the following new final paragraph:

   During the calendar month, toxicity tests used to determine the most sensitive test species shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.

9. We recommend deleting Order section VI.C.2.a because it duplicates, but also in part conflicts with, portions of Monitoring and Reporting Program sections V.A.6 through V.A.8.

10. To explain proper reporting of effluent toxicity tests conducted during accelerated monitoring schedules, we recommend that the second paragraph under Monitoring and Reporting Program section V.A.7 be revised to include the following italicized language. This should help to ensure that valid WET test monitoring results are not improperly reported, or otherwise rendered invalid for NPDES compliance reporting, by the Permittee:

    Within 24 hours of the time the Permittee becomes aware of this result, the Permittee shall implement an accelerated monitoring schedule consisting of four, five-concentration toxicity tests (including the discharge IWC), conducted at approximately two week intervals, over an eight week period*; in preparation for the Toxicity Reduction Evaluation (TRE) process and associated reporting, these results shall also be reported using the EC25*. If each of the accelerated toxicity tests results in "Pass", the Permittee shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail", the Permittee shall immediately implement the TRE Process conditions set forth below. *During accelerated monitoring schedules, only TST results ("Pass" or "Fail", "Percent Effect") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.*

11. To explain proper reporting of effluent toxicity tests conducted during a Toxicity Reduction Evaluation (TRE), we recommend that Monitoring and Reporting Program section V.A.8 be revised to include the following opening paragraph:

During the TRE Process, monthly effluent monitoring shall resume and TST results ("Pass" or "Fail", "Percent Effect") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.

12. We recommend revising Order section V.A.19 and associated chronic toxicity receiving water monitoring provisions (in Monitoring and Reporting Program section VIII.A.1, Table E-4) to be consistent with existing L.A. Regional Water Board NPDES permit requirements for chronic toxicity in the May 8, 2014 permits for Camarillo, Simi Valley, and Thousand Oaks water reclamation plants, and in permits not governed by WQO 2003-0012.

Attachment 2

Pomona Water Reclamation Plant
NPDES No. CA0053619

A. Required Changes.

Based on applicable CWA statutory and regulatory requirements for NPDES effluent limits and relevant information provided in the pre-notice draft permit's fact sheet, the effluent limitations sections of the permit (see Order section IV.A.1.a, Table 4) must be revised to clearly require actual WQBELs for chronic WET which are numeric and incorporate both a daily and monthly expression. The WQBELs must be expressed in a manner that is clearly enforceable and specifically describes testing, analysis, and reporting procedures with which permit compliance will be evaluated. 40 CFR 122.48.

B. Recommended Changes.

Numeric WQBELs for chronic WET in these permits should be accompanied by clear, detailed descriptions of how WET tests are to be conducted and evaluated for compliance evaluation purposes. One possible approach, consistent with the conventions used by the L.A. Regional Water Board, are the recommend following changes to clarify the expression of effluent limitations and the reporting of compliance monitoring results for chronic WET:

1. The conventions used by the L.A. Regional Water Board to translate the Basin Plan's narrative toxicity objective into WET WQBELs for continuous discharges rely on a chronic toxicity MDEL and MMEL, expressed in units of the Test of Significant Toxicity (TST) hypothesis testing approach ("Pass" or "Fail" and "Percent Effect") (see table below). Based on these conventions, which include the L.A. Regional Water Board's chosen statistical approach for interpreting toxicity, the following WQBELs and implementation language are recommended for the permit (see Order section IV.A.1.a):

Parameter	Units	Median Monthly Effluent Limitation	Maximum Daily Effluent Limitation
Chronic Toxicity[1]	Pass or Fail, % Effect (Test of Significant Toxicity)	Pass	Pass or % Effect < 50

[1] The median monthly effluent limitation (MMEL) shall be reported as "Pass" or "Fail". The maximum daily effluent limitation (MDEL) shall be reported as "Pass" or "Fail" and "% Effect". The MMEL for chronic toxicity shall only apply when there is a discharge more than one day in a calendar month period. During such calendar months, exactly three independent toxicity tests are required when one toxicity test results in "Fail".

2. Similarly, based on the L.A. Regional Water Board's chosen statistical approach for interpreting toxicity and limiting WET, the following additions (italicized language) to

the permit's chronic toxicity compliance determination provision (Order section VII.I) are recommended:

The Maximum Daily Effluent Limitation (MDEL) for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST approach, results in "Fail" and the "Percent Effect" is ≥0.50.

"*MMET*" should be corrected to "*MMEL*".

Also, if the TST approach is used, using a 2-concentration test design for data analysis, we recommend the addition of new language to this section of the permit to clarify the transparent reporting of WET test monitoring results. The following italicized language would be appropriate to ensure that valid WET test monitoring results are not improperly reported, or otherwise rendered invalid for NPDES compliance reporting, by the Permittee:

The chronic toxicity MDEL and MMEL are set at the IWC for the discharge (100% effluent) and expressed in units of the TST approach ("Pass" or "Fail", "Percent Effect"). All NPDES effluent compliance monitoring for the chronic toxicity MDEL and MMEL shall be reported using only the 100% effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (Ho) (see above) is not tested using a multi-concentration test design; therefore, the concentration-response relationship for the effluent and/or PMSDs are not reviewed or used to interpret the TST result reported as the effluent compliance monitoring result.

3. Under Order section VII, we recommend adding the following revision related to compliance determination for the required median monthly WQBEL for chronic WET. This language is in existing L.A. Regional Water Board NPDES permit requirements for chronic toxicity compliance determination:

   Median Monthly Effluent Limitation (MMEL)

   If the median of daily discharges over a calendar month exceeds the MMEL for a given parameter, an alleged violation will be flagged and the Permittee will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). However, an alleged violation of the MMEL will be considered one violation for the purpose of assessing State mandatory minimum penalties. If no sample (daily discharge) is taken over a calendar month, no compliance determination can be made for that month with respect to effluent violation determination, but compliance determination can be made for that month with respect to reporting violation determination.

4. Based on the L.A. Regional Water Board's chosen statistical approach for interpreting toxicity and limiting WET, addition of the following italicized effluent monitoring language is recommended for addition to Monitoring and Reporting Program section IV.A.1, Table E-3a:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chronic Toxicity	Pass or Fail, % *Effect (Test of Significant Toxicity)*	24-hour composite	Monthly[1]	[1]
[1] The Permittee shall conduct whole effluent toxicity monitoring as outlined in section V. Please refer to section V.A.7 for the accelerated monitoring schedule. The median monthly summary result shall be reported as "Pass" or "Fail". The maximum daily single result shall be reported as "Pass" or "Fail" and "% Effect". When there is a discharge more than one day in a calendar month period, exactly three independent toxicity tests are required when one toxicity test results in "Fail".				

5. Similarly, under Monitoring and Reporting Program section V.A.5.b, the following correction (italicized language) related to the chronic toxicity MMEL is recommended:

"*Median Monthly Effluent Trigger (MMET)*" should be corrected to "*Median Monthly Effluent Limit (MMEL)*".

6. Under Monitoring and Reporting Program section V.A.5.c, we are recommending the addition of new language (italicized) for chronic toxicity monitoring to explain reporting of WET test compliance monitoring results. This language clarifies that the only test acceptability criteria (TAC) used to invalidate a WET test result are the TAC in EPA's WET test methods:

If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method *(see Table x, below)*, then the Permittee must re-sample and re-test within 14 days.

Table x. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (U.S. EPA 2002, EPA-821-R-02-013).	
U.S. EPA Test Method Number	*Test Acceptability Criteria (TAC)*
Fathead Minnow, Pimephales promelas, Larval Survival and Growth Test Method 1000.0 (Table 1).	*80% or greater survival in controls; average dry weight per surviving organism in control chambers equals or exceeds 0.25 mg. (required)*
Daphnid, Ceriodaphnia dubia, Survival and Reproduction Test Method 1002.0 (Table 3).	*80% or greater survival of all control organisms and an average of 15 or more young per surviving female in the control solutions. 60% of surviving control females must produce three broods. (required)*

Green Alga, Selenastrum capricornutum, Growth Toxicity Test Method 1003.0 (Table 3).	*Mean cell density of at least 1 X 10^6 cells/mL in the controls; and variability (CV%) among control replicates less than or equal to 20%. (required)*

7. To explain proper reporting for reference toxicant test results, we recommend adding the italicized language to the second sentence of Monitoring and Reporting Program section V.A.5.e:

   All reference toxicant test results should be reviewed and reported *using the EC25.*

8. To explain proper reporting of effluent toxicity tests conducted during periods of species sensitivity screening, we recommend that Monitoring and Reporting Program section V.A.4 be revised to include the following new final paragraph:

   During the calendar month, toxicity tests used to determine the most sensitive test species shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.

9. We recommend deleting Order section VI.C.2.a because it duplicates, but also in part conflicts with, portions of Monitoring and Reporting Program sections V.A.6 through V.A.8.

10. To explain proper reporting of effluent toxicity tests conducted during accelerated monitoring schedules, we recommend that the second paragraph under Monitoring and Reporting Program section V.A.7 be revised to include the following italicized language. This should help to ensure that valid WET test monitoring results are not improperly reported, or otherwise deemed invalid for NPDES compliance reporting, by the Permittee:

    Within 24 hours of the time the Permittee becomes aware of this result, the Permittee shall implement an accelerated monitoring schedule consisting of four, five-concentration toxicity tests (including the discharge IWC), conducted at approximately two week intervals, over an eight week period*; in preparation for the Toxicity Reduction Evaluation (TRE) process and associated reporting, these results shall also be reported using the EC25*. If each of the accelerated toxicity tests results in "Pass", the Permittee shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail", the Permittee shall immediately implement the TRE Process conditions set forth below. *During accelerated monitoring schedules, only TST results ("Pass" or "Fail", "Percent Effect") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.*

11. To explain proper reporting of effluent toxicity tests conducted during a Toxicity Reduction Evaluation (TRE), we recommend that Monitoring and Reporting Program section V.A.8 be revised to include the following opening paragraph:

During the TRE Process, monthly effluent monitoring shall resume and TST results ("Pass" or "Fail", "Percent Effect") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.

12. We recommend revising Order section V.A.19 and associated chronic toxicity receiving water monitoring provisions (in Monitoring and Reporting Program section VIII.A.1, Table E-4a) to be consistent with existing L.A. Regional Water Board NPDES permit requirements for chronic toxicity in the May 8, 2014 permits for Camarillo, Simi Valley, and Thousand Oaks water reclamation plants, and in permits not governed by WQO 2003-0012.